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PIB

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for IAS Examination !**

**MONTHLY
COMPILATION
FEB. 2021**

For UPSC Prelims & Mains Examination

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CHROME IAS ACADEMY

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GENERAL STUDIES - II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

PULSE POLIO PROGRAMME

Context

President of India launches countrywide Pulse Polio Programme for 2021.

Highlights

- **Polio National Immunization Day**, is observed on the **31st January 2021**, and also popularly known as **Polio Ravivar**.
- Around 17 crore children of **less than 5 years of age** will be given polio drops **as part of the drive of Government of India** to sustain polio free status of the country.

History of Pulse Polio Programme:

Vaccination against polio in India **started on 1978** with Expanded Programme on Immunization (EPI). By 1999, it covered around 60% of infants, giving three doses of OPV to each.

- In 1985, the **Universal Immunization Programme (UIP)** was launched to cover all the districts of the country.
- In 1995, following the **Global Polio Eradication Initiative of the World Health Organization (1988)**, India launched Pulse Polio immunization program with Universal Immunization Program which aimed at 100% coverage.
- **The last reported cases of wild polio in India** were in West Bengal and Gujarat on 13 January 2011.

On 27 March 2014, the World Health Organization (WHO) declared **India a polio free country**, since no cases of wild polio been reported in for five years.

About Polio:

- Polio (poliomyelitis) mainly affects children under five years of age.
- The Polio virus invades the nervous system and can cause total paralysis in a matter of hours.
- **Polio is mainly passed through person-to-person** (i.e., fecal-oral) contact, and infects persons who do not have immunity against the disease.

Polio Vaccines:

Oral Polio vaccine (OPV): Oral polio vaccine has been the choice for routine immunization in over 120 countries that have eliminated poliomyelitis.

- **OPV has few advantages like** low cost, an event to administer, inducing gut immunity, and herd effect, which interrupts wild poliovirus circulation.
- OPV is **constituted from three Sabin strains of polioviruses, types 1, 2, and 3**, in concentrations of 10,00,000, 1,00, 000, and 6,00,000 infective units (TCID50) per dose, respectively.

GENERAL STUDIES - II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

STARS PROJECT

Context

Agreement for the financial support of the implementation of **Strengthening Teaching-Learning and Results for States (STARS) project** of Ministry of Education was signed between Department of Economic Affairs (DEA) and World Bank along with Ministry of Education.

Highlights

- The proposed World Bank support under STARS is primarily in the form of a **results-based financing instrument called Program for Results (PforR)**.
- This will ensure major reforms at the State level through a set of **disbursement-linked indicators (DLIs)**.
- An **independent Verification agency (IVA)** will verify each result before disbursement of funds.

What is STARS project?

STARS stands for Strengthening Teaching-Learning and Results for States Program (STARS).

- STARS project would be implemented as a new **Centrally Sponsored Scheme** under Department of School Education and Literacy (DoSEL), MOE.
- The project aims **to improve the quality and governance of school education in six Indian states**.
- Six states are- **Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha, and Rajasthan**.
- Some 250 million students (between the age of 6 and 17) in 1.5 million schools, and over 10 million teachers will benefit from the program.
- The STARS project seeks **to support the states in developing, implementing, evaluating and improving interventions with direct linkages to improved education outcomes and school** to work transition strategies for improved labour market outcomes.

The STARS Project has two major components:

At the national level, the project envisages the following interventions which will benefit all states and UTs:

- To strengthen MOE's national data systems to capture robust and authentic data on retention, transition and completion rates of students.
- To support MOE in improving states PGI scores by incentivizing states governance reform agenda through SIG (State Incentive Grants).
- To support the strengthening of learning assessment systems.
- To support MOE's efforts to establish a National Assessment Center (PARAKH).
- Further, the STARS project includes a Contingency Emergency Response Component (CERC) under the National Component which would enable it to be more responsive to any natural, man-made and health disasters.

How STARS is beneficial for India?

STARS will support India's vision 'Education for All' through a series of initiatives that are listed below:

1. **Customised local-level Solutions:** The STARS project will focus on direct delivery of education services at the state, district and sub-district levels by providing enhanced customised local-level solutions in improving schools.
2. **Address specific demands:** STARS will address demands from stakeholders and parents, for providing better quality education.
3. **Attention to students from vulnerable sections:** The program will give special attention to students from vulnerable sections.
4. **Changing job trend:** The STARS program will help the students in keeping up with the rapidly changing needs of the job markets.
5. **Equipping teachers:** In the technology-driven era, the program will also equip the teachers to achieve a better learning outcome as they are playing a vital role in providing quality education. The program will carry out needs-based training for teachers.
6. **Investment in India's human capital:** The program will also invest in India's human capital program by strengthening foundational learning for the students of Classes 1 to 3 and further preparing them with cognitive, socio-behavioural and language skills to meet future labour market needs.

What are the challenges with the project?

- The STARS project fails to address basic capacity issues such as vacancies across the education system.
- It must be noted that without a capable and motivated faculty, the education system cannot be improved. This can only be done by educating teachers and making them familiar with technology through training.

- The **World Bank** has ignored the decentralization of decision making by ignoring the devolution of funds.
- **Excessive use of Information and Communications Technology** worsens the challenges rather than simplifying them. It can only be fruitful if the pre-conditions are fulfilled.

Mains Question:

Outsourcing basic governance functions by 'expanding private initiatives' and 'reducing government tasks' will not make education 'more relevant to local needs'. Discuss

FUNDAMENTALS: IMPORTANT INTERNATIONAL INSTITUTIONS

Food and Agriculture Organization

About FAO

The Food and Agriculture Organization (FAO) is a **specialized agency of the United Nations** that leads international efforts to defeat hunger.

- Its Latin motto, **fiat panis**, translates to **"let there be bread"**.
- It was **founded in October 1945**.
- **The FAO is headquartered in Rome, Italy** and maintains regional and field offices around the world, operating in over 130 countries.
- **Composed of** 194 member states, the FAO is governed by a biennial conference representing each member country and the European Union, which elects a 49-member executive council.

Objective of FAO

- The main goal is to achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives.

India and FAO

India has had a historic association with FAO.

- Indian Civil Service Officer Dr. Binay Ranjan Sen was the Director General of FAO during 1956-1967.
- The World Food Programme, **which has won the Nobel Peace Prize 2020**, was established during his time.
- India's proposals for the **International Year of Pulses in 2016** and the **International Year of Millets 2023** have also been endorsed by FAO.

CHROME FACTS FOR PRELIMS

PRABUDDHA BHARATA

- 125th anniversary was celebrated of 'Prabuddha Bharata',
- It is a monthly journal of the Ramakrishna Order **started by Swami Vivekananda**.

India International Silk Fair

8th India International Silk Fair was inaugurated.

It is the Sourcing Fair for silk and silk blend products organised by the **Indian Silk Export Promotion Council** under the aegis of Ministry of Textiles and sponsored by Department of Commerce.

- India is the 2nd largest producer of Silk.
- India is the **only country in the world** which produces all the four major varieties of silke. **Mulberry, Eri, Tassar, and Muga**.
- India has around **11 Geographical Indications (GI)** such as Pochampally Ikat, Chanderpaul Silk, Mysore Silk, Kanchipuram Silk, Muga Silk, Salem Silk, Arni Silk, Champa Silk, Bhagalpur Silk, Banaras Brocade and Sarees etc.

PIB-FEBRUARY 3rd, 2021

GENERAL STUDIES - I

Topic– *The Freedom Struggle – its various stages and important contributors/contributions from different parts of the country.*

CHAURI CHAURA INCIDENT

Context

'Chauri Chaura' Centenary Celebrations will be inaugurated on 4th February.

February 4 marks the **beginning of the 100th year of the "Chauri Chaura" incident**, a landmark in India's freedom movement.

About the 'Chauri Chaura' incident:

- The "Chauri Chaura" incident took place on **4 February 1922** at Chauri Chaura in the Gorakhpur district of Uttar Pradesh.
- A large group of **freedom fighters participating in the Non-cooperation movement**, clashed with local police who opened fire.
- The **locals attacked the police station and set fire to it**, killing its occupants.
- Mahatma Gandhi, who was completely against violence, **stopped the Non-cooperation movement on 12 February 1922**.

- After an immediate crackdown, the British colonial rulers arrested hundreds of people for the “Chauri Chaura” incident.
- **Over 200 people were tried on charges of rioting**; six of them died in police custody.
- The trial lasted eight months; most of those held were sentenced to death.
- The **Allahabad High Court in April 1923** reviewed the death sentences; 19 were confirmed and 110 were given life sentence.

Mains Question:

Discuss the reasons and consequences of ‘Chauri Chaura’ incident. Why Mahatma Gandhi end the fervent Non-cooperation movement at that time? Analyse.

GENERAL STUDIES - II

Topic– Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes;

CONSUMER WELFARE FUND (CWF)

Context:

CWF has worked successfully under the extant Consumer Welfare Fund (CWF) Guidelines, 2019 and achieved the objective for which it has been set up: Minister in Lok Sabha.

About it:

Consumer Welfare Fund (CWF) has been set up under the **Central Goods and Services Tax (CGST) Act, 1917**, to promote and protect the welfare of the consumers.

Objective

The overall objective of the Consumer Welfare Fund is to provide financial assistance to promote and protect the welfare of the consumers and strengthen the consumer movement in the country.

Steps taken by Govt. to promote and protect the welfare of the consumers:

- **Jago Grahak Jago:** A Pan-India consumer awareness campaign “JagoGrahakJago” through print, electronic, outdoor and social media through various agencies/ organizations/ Ministries.
- **Providing grant-in-aid** to States/UTs to generate awareness in regional languages.
- **Dissemination of consumer awareness** messages through social media.
- Celebration of **World Consumer Rights Day/National Consumer Day**.
- **Bureau of Indian Standard (BIS)** Mobile Care App.
- The **Consumer Protection Act, 2019 (CP Act 2019)** has been implemented w.e.f. 20th July, 2020.
- Government has set up a **National Consumer Helpline (NCH)** to handle the consumer grievances.
- Consumer awareness programmes are organized through the **network of BIS Offices** across the country.

GENERAL STUDIES - III

Topic– Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security;

ONORC SCHEME

Context:

So far, the facility has been enabled in 32 States/UTs covering nearly 69 Crore beneficiaries, almost 86% of NFSA population of the country.

What is One Nation, One Ration Card scheme (ONORC)?

The Department in association with State/UT Governments is implementing 'One Nation One Ration Card' (ONORC) plan for nation-wide portability of ration cards under the **National Food Security Act (NFSA), 2013**.

Need for the ONORC:

Since ration cards are issued by state governments, this implied that beneficiaries could procure food grains **only from the designated ration shops within the concerned state**.

- **If a beneficiary were to shift to another state**, he/she would need to apply for a new ration card in the second state.
- The ONORC scheme **attempts to address this gap in TPDS delivery**.
- Essentially, the scheme has been launched **keeping in mind the internal migration of our country**, since people keep moving to different states in search of better job opportunities and higher standards of living.

Benefits of ONORC Scheme

- The **beneficiaries from one state can get their share of rations** in other states where the ration card was originally issued.
- After the scheme gets implemented at the national level, **any PDS recipient can use their ration cards at any PDS shop across the country**.
- ONORC seeks to **provide universal access to PDS food grains for migrant workers**.
- ONORC will also give the beneficiaries the opportunity **to opt for the dealer of their choice**.
- If **any dealer misbehaves or misallocates**, the beneficiary can switch to another FPS shop instantly.
- ONORC will be particularly **beneficial for women and other disadvantaged groups**, given how social identity (caste, class and gender) and other contextual factors (including power relations) provide a strong backdrop in accessing PDS.
- This will help achieve the target set under **SDG 2: Ending hunger by 2030**.

Concerns and Challenges:

- **Every state has its own rules** for Public Distribution System (PDS).
- If 'One Nation, One Ration Card' is implemented, it will further **boost corruption in an already corrupted Public Distribution System**.
- The scheme will increase the woes of the common man and, the **middlemen and corrupt PDS shop owners will exploit them**.
- The **digitisation of this PDS process**, through Aadhaar-linked ration cards and smart cards, has been pushed in an effort to reduce leakages. However, there has been a rise of exclusion errors in post-Aadhaar seeding.
- There are **many sections of society who still don't have Aadhar Card**, thereby depriving them of food security.

GENERAL STUDIES - I

Topic– Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.

NEW CIRCLES OF ARCHAEOLOGICAL SURVEY OF INDIA

Context

Archaeological Survey of India, an attached office of Ministry of Culture, Government of India vide Notification dated 28th August 2020 established **Six new Circles** by bifurcation of its existing Circles.

In addition **Hampi Mini-Circle** has been upgraded as full-fledged Circle and Delhi Mini-Circle merged with Delhi Circle.

Highlights

The Ministry of Culture has announced **7 new circles of Archaeological Survey of India**.

- The new circles have been created in **Madhya Pradesh, Tamil Nadu, Uttar Pradesh, Karnataka, West Bengal and Gujarat**.
- **Hampi, Trichy, Raiganj, Rajkot, Jabalpur, Jhansi & Meerut** have been announced as new circles.
- Earlier there were **29 ASI circles across the country**.

New circles:

1. **Trichy in Tamil Nadu:** which has thousands of temples and glorious memories of the **Chola kings**, Trichy has been made a new circle along with the **circle of Chennai**.
2. **Hampi city in Karnataka:** is a place of international importance from the point of view of archaeological heritage therefore the Hampi Sub-Circle now has been made a new full fledged circle.

3. **Raiganj In West Bengal:** has been made a new circle along with Kolkata, this will eliminate geographical inconvenience in a big state like Bengal.
4. **Rajkot In Gujarat:** has been announced a new circle along with Vadodara.
5. **Jabalpur in Madhya Pradesh:** has been announced a new circle along with Bhopal. This will include the monuments from Jabalpur, Rewa, Shahdol and Sagar divisions.
6. **Jhansi** in Bundelkhand, Uttar Pradesh
7. **Meerut in western Uttar Pradesh** have been announced **two new circles along with Lucknow and Agra in Uttar Pradesh.**

About Archaeological Survey of India (ASI)

- The Archaeological Survey of India (ASI), **under the Ministry of Culture**, is the premier organization for the archaeological researches and protection of the cultural heritage of the nation.
- **Maintenance of ancient monuments and archaeological sites** and remains of national importance is the prime concern of the ASI.
- Besides it regulate all archaeological activities in the country as per the provisions of the **Ancient Monuments and Archaeological Sites and Remains Act, 1958.**
- It also regulates Antiquities and Art Treasure Act, 1972.

Mains Question:

Discuss the role and importance of Archaeological Survey of India in course of maintain History.

GENERAL STUDIES - I

Topic– Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

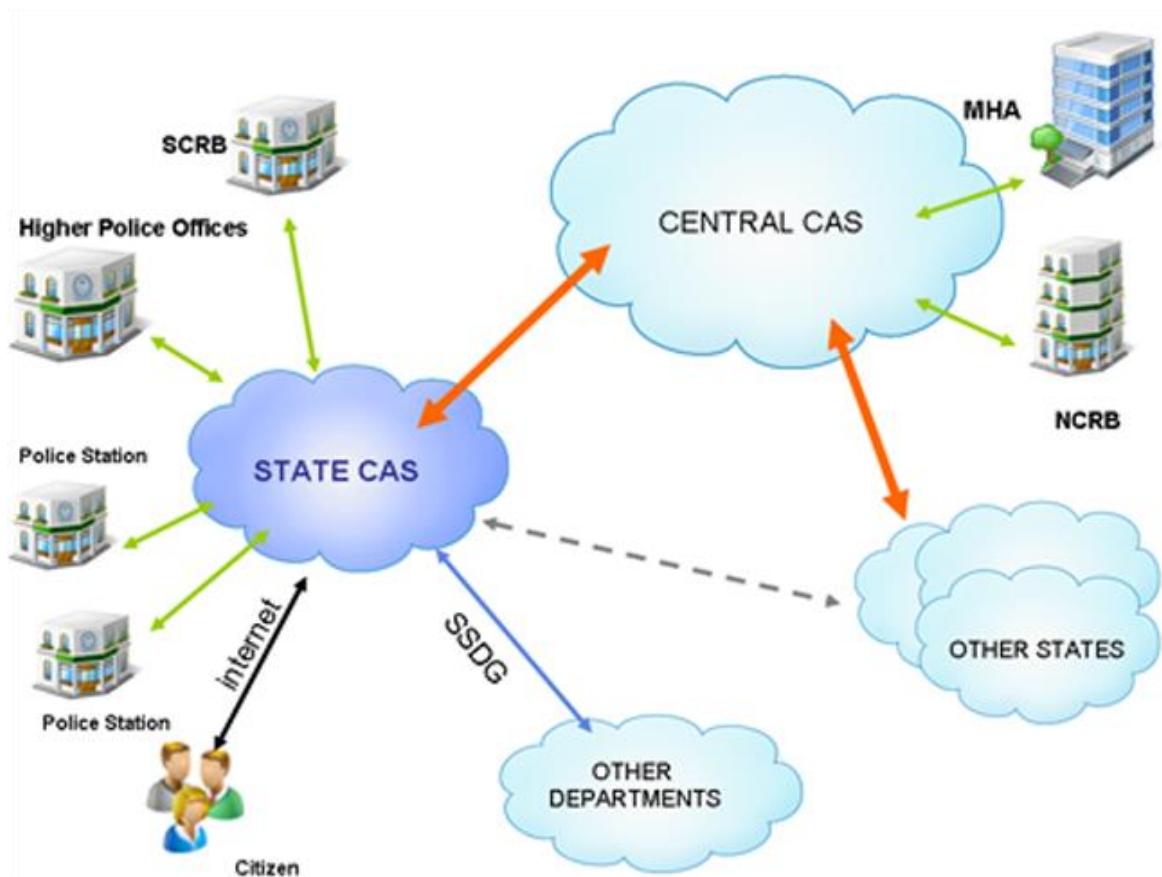
CRIME AND CRIMINAL TRACKING NETWORK AND SYSTEMS (CCTNS)

Context

Use of Crime and Criminal Tracking Networks and Systems (CCTNS) and Inter-Operable Criminal Justice System (ICJS) is regularly reviewed by the Government with the States/ Union Territories.

What is the CCTNS Project?

- CCTNS (Crime and Criminal Tracking Network & Systems) is a Mission Mode Project **under the National e-Governance Plan (NeGP)** of Govt. of India.
- It was initiated **in June 2009** which **aims at** creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at the Police Station level.



Objectives of 'CCTNS':

The objectives of the Scheme can broadly be listed as follows:

- Make the Police functioning citizen friendly and more transparent by automating the functioning of Police Stations.
- Improve delivery of citizen-centric services through effective usage of ICT.
- Improve Police functioning in various other areas such as Law and Order, Traffic Management etc.
- Facilitate Interaction and sharing of Information among Police Stations, Districts, State/UT headquarters and other Police Agencies.
- To improve overall efficiency and bring transparency through e-governance.

Benefits:

- The Full implementation of the Project with all the new components would lead to a **Central citizen portal** having linkages with State level citizen portals.
- It will provide a number of **citizen friendly services** like Police Verification for various purposes including passport verification, reporting a crime including cyber-crime and online tracking of the case progress etc.
- The project will **enable National level crime analytics** to be published at increased frequency.
- It will help the policy makers as well as lawmakers in taking appropriate and timely action.

KRITAGYA- AGRI INDIA HACKATHON

The **Indian Council of Agricultural Research (ICAR)** has started organising KRITAGYA- a National level hackathon in the month of August, 2020.

- It aims to promote innovation in agriculture and allied sectors in the country.
- It also provide an opportunity to the students along with faculties, innovators for showcasing their innovative approaches & technologies in agriculture and allied sectors.

Aero India 2021

Aero India 2021 **three-day mega event** to showcase the prowess of Aviation Industry will begin at **Bengaluru**.

- It is a **biennial international military and civil airshow** and a premier event that draws international and Indian military and civil aircraft makers, their support industries, military brass and government dignitaries, and business visitors.
- This year's event will mainly focus on India's defence research and technology capabilities with public sector undertakings participating in full strength.

PIB-FEBRUARY 4th, 2021

GENERAL STUDIES - I

Topic– *Distribution of key natural resources across the world (including South Asia and the Indian sub-continent).*

LITHIUM DEPOSITS IN MANDYA DISTRICT OF KARNATAKA

Context:

Preliminary survey shows deposits of Lithium in Mandya district of Karnataka.

The preliminary surveys on surface and limited subsurface by **Atomic Minerals Directorate for Exploration and Research (AMD)**, have shown **presence of Lithium resources of 1,600 tonnes (inferred category) in the pegmatites** of Marlagalla – Allapatna area, Mandya district, Karnataka.

About Lithium:

- Lithium is part of the **alkali metal group**.
- Like all alkali metals it has a single balance electron that it readily gives up to form a cation or compound.

Characteristics and Properties:

- At room temperature **lithium is a soft metal that is silvery-white in color.**
- It is the least dense of the solid elements and is **the lightest of all the metals.**
- It has the highest specific heat capacity of any solid element.
- Lithium's single valence electron allows it to be a good conductor of electricity. It is flammable and can even explode when exposed to air and water.
- It needs to be stored in mineral oil as it will react with air or water.
- It can cause burns if it comes into contact with the skin.

Uses:

- Lithium is a **key element for new technologies** and finds its use in ceramics, glass, **telecommunication and aerospace industries.**
- The well-known uses of Lithium are in **Lithium ion batteries, lubricating grease, high energy additive to rocket propellants, optical modulators** for mobile phones and as a precursor to tritium used as a raw material for thermonuclear reactions i.e. fusion.
- **The thermonuclear application** makes Lithium as "Prescribed substance" under the **Atomic Energy Act, 1962** which permits AMD for exploration of Lithium in various geological domains of the country.
- Due to the continuously increasing demand of Lithium ion batteries, the requirement of Lithium has increased over last few years.

Significance of findings:

- The significance and quantity of lithium resources in **Marlagalla-Allapatna area**, Mandya district, Karnataka may be established only after the completion of exploration in the entire area.
- Subsequently, plan for commercial exploitation of the lithium deposits can commence after the technical, social and economic feasibility studies in the area.

GENERAL STUDIES-II

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

ONE DISTRICT ONE PRODUCT SCHEME

Context

One District One Product (ODOP) initiative is operationally merged with 'Districts as Export Hub' initiative being implemented by DGFT, Department of Commerce.

About ODOP scheme

One District One Product (ODOP) is **an initiative which is seen as a transformational step forward towards realizing the true potential of a district, fuel economic growth and generate employment and rural entrepreneurship**, taking us to the goal of AtmaNirbhar Bharat.

Objective:

The objective is **to convert each District of the country into an Export Hub** by identifying products with export potential in the District.

- To address bottlenecks for exporting these products,
- To support local exporters/manufacturers to scale up manufacturing, and
- To find potential buyers outside India with the aim of promoting exports,
- To promoting manufacturing & services industry in the District and generate employment in the District.

Financial Assistance under the ODOP Programme

Various schemes and programmes are there to help people seek financial assistance.

1. **Common Facility Centre (CFC) Scheme:** This scheme would provide financial assistance of up to 90 per cent of the project cost. It is provided by the state government.
2. **Marketing Development Assistance Scheme:** The financial assistance would be provided to all participants of national and international exhibitions and fairs. They can use it for displaying and selling their products selected under ODOP programme.
3. **Finance Assistance Scheme (Margin Money Scheme):** This scheme benefits with not whole but a margin of the project cost. The applicants receive it in the form of subsidy to set up the project.
4. **Skill Development Scheme:** In this, all skilled artisans would be trained through RPL (Recognition of Prior Learning).
5. They would be certified through various Sector Skill Councils, SSCs, whereas the unskilled artisans would be trained for 10 days and provided with an advanced toolkit which will be free of cost

Significance of ODOP

1. The ODOPs are useful in **the preservation and development of local crafts/ skills and promoting art.**
2. It aids in the **increase in the incomes and local employment** which results in the decline in migration in search of employment.
3. **Improvement in product quality and skill development** would be a result of this scheme.
4. ODOP would also help in **transforming the products in an artistically** (it can be either through packaging or branding).
5. To **connect the production with tourism.** This can be done using a live demo and sales outlet that would provide gifts and souvenir.
6. The programme would also help **resolve the issues of economic differences** along with regional imbalances among states district.
7. The **artisans can be trained** and can be taken to the national and international level after successful implementation of their projects at the state level.

Way forward:

Under the initial phase of the ODOP programme, **106 Products have been identified from 103 districts across 27 States.**

- State Export Promotion Committee (SPEC) and **District Export Promotion Committee (DEPC)** have been constituted in all states and districts of India, **except districts of the state of West Bengal.**
- It has been a significant initiative to launch such a scheme that would, in turn, give a push to Make in India in the state, give a new life to its small scale industries and generate employment for lakhs of people by reviving many lost arts, traditions and professions.

GENERAL STUDIES-II

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

GOBARDHAN SCHEME

Context:

Union Ministers jointly launch Unified Portal of Gobardhan to promote Gobardhan scheme and track real time progress.

About the 'Gobardhan scheme':

- Ministry of Jal shakti has launched the **GOBAR (Galvanizing Organic Bio-Agro Resources) – DHAN scheme.**
- The scheme is being implemented **as part of the Swachh Bharat Mission (Gramin).**

Aim:

- The scheme aims to positively impact village cleanliness and generate wealth and energy from cattle and organic waste.
- The scheme also aims at creating new rural livelihood opportunities and enhancing income for farmers and other rural people.

Key features of the Scheme:

- **The scheme focuses on** managing and converting cattle dung and solid waste in farms to useful compost, biogas and bio-CNG.
- It will also help in **keeping the village clean** while increasing income of farmers and cattle herders.
- Under it, **biogas generation** will help to increase self-reliance in energy utilized for cooking and lighting.
- The villagers will be mobilized **to create self-help groups (SHGs)** and creative societies that will help in clean energy and green jobs initiative.
- **Gram panchayats will play key role** in implementation of this scheme under which bio-gas plants from cattle dung will be set up at individual or community level.

- The **central and state governments will provide funds in the ratio of 60:40**, which will depend upon the number of households in villages.

Significance:

- The scheme will be hugely beneficial for country as India is home to highest cattle population in world (around 300 million in number) which produces around 3 million tonnes of dung.
- It will encourage farmers to consider dung and other waste not just as waste but as source of income.

GENERAL STUDIES-III

Topic– *Conservation, environmental pollution and degradation, environmental impact assessment.*

ETHANOL AS AN ALTERNATE FUEL

Context:

Government has been promoting use of ethanol as a blend stock with main automotive fuel like petrol in line with the **National Policy on Biofuels (NBP) -2018** under the **Ethanol Blended Petrol (EBP) Programme**.

This policy envisages an indicative **target of blending 20% ethanol in petrol by 2030**.

Ways and means to blending percentage in petrol

- The producers of ethanol (sugar mills), **buyers of ethanol (OMCs)** and the lenders (banks) will enter into a tri-partite agreement (TPA).
- It would enable them **for producing, buying and paying for the ethanol through an escrow account etc.**, the banks can consider giving loans to sugar mills even with weak balance sheets.
- This would facilitate **mills to avail loans from banks to set up new distilleries or to expand their existing distilleries**.
- Thereby, help in achieving the blending target under Ethanol Blended with Petrol programme.

Way forward

- To encourage sugar mills to divert excess sugarcane to produce ethanol for blending with petrol, **the Government has allowed production of ethanol from B-Heavy Molasses, sugarcane juice, sugar syrup and sugar; and has also fixed the remunerative ex-mill price of ethanol derived from these feed-stocks**.
- Sugar mills having distillation capacity have been advised to divert B-heavy molasses and sugar syrup for producing ethanol to utilize their capacity to maximum extent.
- States have also been requested to ensure smooth movement of molasses & ethanol.

What is Bioethanol?

Bioethanol fuel is **mainly produced by the sugar fermentation process**, although it can also be manufactured by the chemical process of reacting ethylene with steam.

- Bioethanol is the principle fuel used as a **petrol substitute** for road transport vehicles.
- The main sources of sugar required to produce ethanol come from fuel or energy crops.
- **Ethanol or ethyl alcohol (C₂H₅OH) is a clear colourless liquid, it is biodegradable, low in toxicity and causes little environmental pollution if spilt.**
- By blending ethanol with gasoline we can also oxygenate the fuel mixture so it burns more completely and reduces polluting emissions.

Mains Question:

The Government's initiative to increase blending percentage in petrol would enable sugar mills to make timely payment of cane dues of farmers. Discuss.

PIB-FEBRUARY 5th, 2021

GENERAL STUDIES- III

Topic– Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

KALAM PROGRAM FOR INTELLECTUAL PROPERTY LITERACY AND AWARENESS CAMPAIGN (KAPILA)

Context:

So far, total 46,556 users have been registered for KAPILA: Education Ministry

What is it?

The Government has launched a campaign namely **Kalam Program** for Intellectual Property Literacy and Awareness Campaign (KAPILA) for **Intellectual Property Literacy and creating patent awareness on 15th October, 2020.**

- It was marked as the '**National Innovation Day**' and the **89th birth anniversary** of former President and Scientist, Late Dr. APJ Abdul Kalam.
- **Under this campaign**, students pursuing education in higher educational institutions will get information about the correct system of application to patent inventions and will be made aware of their rights.

Objectives:

- The objectives of the scheme include **creating awareness regarding Intellectual Property Rights (IPR) in Higher Education Institutions (HEIs).**
- It will be enabling of IP protection of inventions originating from faculty and students of HEIs, development of Credit Course on IPR, training program on IPR for faculty and students of HEIs and sensitization and development of vibrant IP filing system.

Highlights:

- The **Institution Innovation Council (IIC)** was established by the Ministry of Education in 2018 and IICs have been established in about 1700 higher educational institutions.
- **The aim is to** establish IICs in 5000 higher educational institutions under **IIC 3.0**.
- Recognition of international standards of copyright protection and incentives for intellectual property have helped **India jump eight places in 2019 to 36th position on the International Intellectual Property (IP) Index**, the highest gain for any country this year.

Need for:

For India to become a \$5 trillion economy, it is critical to have more awareness of protecting intellectual property.

Way forward:

India has been aggressively pursuing excellence in the area of IP and trademark. Research students and scientists of India engaged in research and development must apply to preserve and safeguard their inventions.

GENERAL STUDIES- III

Topic– Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

POWER SECTOR REFORMS

Context:

Andhra Pradesh becomes the 2nd State to undertake Power Sector reforms **stipulated by the Department of Expenditure, Ministry of Finance**.

Besides Andhra Pradesh, **Madhya Pradesh** has also undertaken reforms in the power sector.

What are the Power Sector reforms?

- Power Sector reforms stipulated by the Ministry of Finance **aim at creating a transparent and hassle free provision of power subsidy to farmers and prevent leakages**.
- **They also aim at** improving the health of power distribution companies by alleviating their liquidity stress in a sustainable manner.

As per the guidelines issued by the Department of Expenditure, the States undertaking reforms in power sector are **granted permission to raise additional financial resources of up to 0.25 percent of the GSDP**.

This is linked to a set of 3 reforms in the sector:

1. **05 % of GSDP for reduction in Aggregate Technical & Commercial losses** in the State as per prescribed targets.
2. Another, **0.05 % of GSDP is allowed for reduction in the gap** between Average Cost of Supply and Average Revenue Realisation (ACS-ARR gap) in the State as per prescribed targets.

3. Finally, **15 % of GSDP of the State on introduction of Direct Benefit Transfer (DBT)** to all farmers in the State in lieu of free/ subsidised electricity.

For this, the State government has to frame a scheme for transfer of cash and implement the scheme in at least one district by 31st December, 2020.

Benefits for States:

The States get permission to raise additional funds equivalent to 0.25 percent of GSDP on completion of reforms in each sector.

The four citizen centric areas identified for reforms were:

1. Implementation of One Nation One Ration Card System,
2. Ease of doing business reform,
3. Urban Local body/ utility reforms and
4. Power Sector reforms.

Conclusion:

Till now, **16 States have carried out at least one of the four stipulated reforms** and have been granted reform linked borrowing permissions.

Out of these, 12 States have implemented the one nation one ration card system, 11 States have done ease of doing business reforms, 5 States have done local body reforms and 2 States have undertaken power sector reforms.

GENERAL STUDIES - III

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

DISPUTES ON PROJECTS OF KRISHNA & GODAVARI RIVER

Context:

Both the Governments of Telangana and Andhra Pradesh have mutually complained against each other about new projects on Krishna and Godavari rivers without submitting their Detailed Project Reports (DPR) to Krishna River Management Board (KRMB) and Godavari River Management Board (GRMB) respectively for appraisal and clearance.

What's the issue?

The two States- **Andhra Pradesh and Telangana**– share stretches of the Krishna and the Godavari and own their tributaries.

- **They have embarked on several new projects** without getting clearance from the river boards, the Central Water Commission and the apex council comprising the Union Water Resources Minister and the Chief Ministers, as mandated by the **Andhra Pradesh Reorganisation Act, 2014**.

- But, Telangana government last year filed a complaint against Andhra Pradesh government for taking up projects across Krishna river.

History of dispute:

The dispute dates back in time of erstwhile Hyderabad and Mysore states, and later continuing between successors Maharashtra, Karnataka and Andhra Pradesh.

In 1969, the **Krishna Water Disputes Tribunal (KWDT)** was set up under the **Inter-State River Water Dispute Act, 1956**, and presented its report in 1973.

The report, which was published in 1976, divided the 2060 TMC (thousand million cubic feet) of Krishna water at 75 per cent dependability into three parts:

1. 560 TMC for Maharashtra.
2. 700 TMC for Karnataka.
3. 800 TMC for Andhra Pradesh.

Revised order:

As new grievances arose between the states, the **second KWDT was instituted in 2004**.

- It delivered its report in 2010, which made allocations of the Krishna water at 65 per cent dependability and for surplus flows as follows: 81 TMC for Maharashtra, 177 TMC for Karnataka, and 190 TMC for Andhra Pradesh.

Bifurcation of the states:

After the creation of Telangana as a separate state in 2014, Andhra Pradesh is asking to include Telangana as a separate party at the KWDT and that the allocation of Krishna waters be reworked among four states, instead of three.

The Krishna:

- It is an east-flowing river. It originates at Mahabaleshwar in Maharashtra and merges with the Bay of Bengal, flowing through Maharashtra, Karnataka, Telangana and Andhra Pradesh.
- **Tributaries:** Tungabhadra, Mallaprabha, Koyna, Bhima, Ghataprabha, Yerla, Warna, Dindi, Musi and Dudhganga.

Godavari River:

It originates from **Trimbakeshwar near Nasik in Maharashtra** and flows for a length of about 1465 km before merging into the Bay of Bengal.

- **The Godavari basin extends** over states of Maharashtra, Andhra Pradesh, Chhattisgarh and Odisha in addition to smaller parts in Madhya Pradesh, Karnataka and Union territory of Puducherry.
- **Tributaries:** Pravara, Purna, Manjra, Penganga, Wardha, Wainganga, Pranhita (combined flow of Wainganga, Penganga, Wardha), Indravati, Maner and the Sabri.

GENERAL STUDIES- III

Topic– *Role of women and women's organizations, Population and associated issues, Poverty and developmental issues, Urbanization, their problems and their remedies.*

BETI BACHAO BETI PADHAO (BBBP) SCHEME

Context:

As per the evaluation report of NITI Aayog, Beti Bachao Beti Padhao (BBBP) scheme has been able to generate significant mass- mobilisation to eliminate gender discrimination and valuing the girl child and the scheme has been able to develop many good practices and community-level initiatives.

About the BBBP Scheme:

BBBP is a **tri-ministerial initiative** of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.

- **It focuses on** awareness and advocacy campaign for changing mindsets, multi-sectoral action in select districts.
- **It enables girls' education** and effective enforcement of Pre-Conception & Pre Natal Diagnostic Techniques (PC&PNDT) Act.

Objective:

- **The overall objective** of the BBBP Scheme is **to address the issue of decline in Child Sex Ratio and create an enabling environment for education of the girl child.**
- **The specific objectives** of the scheme include preventing gender biased sex selective elimination; ensuring survival and protection of the girl child and ensuring education and participation of the girl child.

Implementation:

- It is a **Central Sector Scheme** with 100% financial assistance for District level component.
- The fund are directly released to the DC/DM's account for smooth operation of the Scheme.

Outcomes:

Child Sex Ratio (Census by Registrar General of India) is a **decadal process**.

Hence, an intermediary targets i.e. **Sex Ratio at Birth (SRB)** have been set as a **monitoring parameter** for the progress of Scheme.

- SRB has shown an **improving trend of 16 points at National level** from 918 (2014-15) to 934 (2019- 20).
- The education gross enrolment ratio of girls in the schools at the secondary level has also improved from 77.45 per cent (2014-15) to 81.32 per cent (2018-19-provisional figures).

GANGA AMANTRAN ABHIYAN

Ganga Aamantran Abhiyan, a **rafting and kayaking expedition on the Ganga River from Devprayag to Ganga Sagar**, was organised between 10th October 2019 to 12th November 2019.

- The expedition encompassed **five Ganga basin States**, i.e. Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal.
- **34 locations were marked as stops** including Rishikesh, Haridwar, Kanpur, Allahabad, Varanasi, Patna, Sonpur and Kolkata.
- It aims **to connect people to the river and to spread the message of river rejuvenation & water conservation** on a massive scale.

PIB-FEBRUARY 6th, 2021

GENERAL STUDIES-II

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

STARTUP INDIA SEED FUND SCHEME

Context:

Startup India Seed Fund Scheme (SISFS) has been approved for the period of next four years starting from 2021-22.

Highlights:

- It will be implemented with effect from 1st April 2021.
- 945 Crore corpus will be divided over the next 4 years for providing seed funding to eligible startups through eligible incubators across India.
- The scheme is expected to support about 3600 startups.

Objective:

The Scheme aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization.

Benefits under 'Atmanirbhar Bharat' for Startups:

By Reserve Bank of India: Rescheduling of Payments – Term Loans and Working Capital Facilities:

- **In respect of all term loans** were permitted to grant a moratorium of three months on payment of all instalments falling due between March 1, 2020 and May 31, 2020.

- **In respect of working capital facilities** sanctioned in the form of cash credit/overdraft , lending institutions were permitted to defer the recovery of interest applied in respect of all such facilities during the period from March 1, 2020 upto May 31, 2020.
- **Kamath Committee:** According to the recommendations of an expert committee, RBI has specified five specific financial ratios and the sector-specific thresholds for each ratio in respect of 26 sectors to be taken into account while finalising the resolution plans.

Easing of Working Capital Financing:

In respect of working capital facilities sanctioned to borrowers facing stress on account of the economic fallout of the pandemic, **lending institutions may recalculate the 'drawing power'** by reducing the margins and/or by reassessing the working capital cycle.

Measures for businesses including MSMEs – These measure would support eligible startups

- Rs 3 lakh crore Emergency Working Capital Facility for Businesses, including MSMEs.
- Rs 20,000 crore Subordinate Debt for Stressed MSMEs.
- Rs 50,000 crore Equity infusion for MSMEs through Fund of Funds.

New definition of MSME:

1. The definition of **micro manufacturing and services unit** increased to Rs. 1 crore of investment and Rs. 5 crore of turnover.
2. **The limit of small unit increased** to Rs. 10 crore of investment and Rs 50 crore of turnover.
3. **The limit of a medium unit** increased to Rs 20 crore of investment and Rs. 100 crore of turnover.
4. **The limit for medium manufacturing and service units** was further increased to Rs. 50 crore of investment and Rs. 250 crore of turnover.

It has also been decided that the turnover with respect to exports will not be counted in the limits of turnover for any category of MSME units whether **micro, small or medium**.

Production-Linked Incentive (PLI) Scheme:

- For enhancing India's Manufacturing Capabilities and Enhancing Exports – Atmanirbhar Bharat, the PLI Scheme in the 10 key sectors were introduced.
- This will make **Indian manufacturers globally competitive**, attract investment in the areas of core competency and cutting-edge technology; enhance exports and make India an integral part of the global supply chain.
- **It aims to** overall growth in the economy and create huge employment opportunities.

Reliefs through Employee Provident Fund (EPF):

- **Under Pradhan Mantri Garib Kalyan Package (PMGKP)**, payment of 12% of employer and 12% employee contributions was made into EPF accounts of eligible establishments.

EPF contribution reduced for Business & Workers for 3 months:

- Under this package the statutory rate of EPF contribution of both employer and employee has been reduced to 10 percent of basic wages and dearness allowances from existing rate

of 12 percent for all class of establishments covered under the Employees' Provident Funds & Miscellaneous Provisions Act, 1952.

Need for:

The Indian startup ecosystem suffers from capital inadequacy in the seed and proof-of-concept development stage.

- Many startups die because of the lack of risk-taking appetite in the Indian investment ecosystem.
- This is the reason why unlike the US or China, India hasn't seen enough of product innovations and instead remained to be a service provider.

GENERAL STUDIES-II

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

INTEGRATED SKILL DEVELOPMENT SCHEME

Context:

Government is implementing various policy initiatives and schemes for supporting the development of textile sector.

About the ISDS:

- **The Integrated Skill Development Scheme (ISDS)** is introduced to cater to skilled manpower needs of Textile and related segments such as apparel, handicrafts, handlooms, jute, sericulture & technical textiles through skill development training programs.
- **The Scheme will enhance the capacity and employability** of the targeted trainees as it covers all facets of skill development such as basic training, skill upgradation, advanced training in emerging technologies, training of trainers, orientation towards modern technology, managerial skill etc.

Background:

The textiles sector has the second largest employment after agriculture sector and occupies an important position in the Indian economy.

- It also contributes **14% to industrial production, 4% to India's GDP and constitutes to 13% of country's export earning**, with over 45 million people employed directly.
- **As per the NSDC report**, the overall employment in the textile and clothing sector expected to increase from about 33 to 35 million in 2008 to about 60 to 62 million by 2022.

- This would translate to an incremental human resource requirement of about 25 million persons by 2022.
- Of this, the mainstream textile and clothing sector has the potential to employ about 17 million persons incrementally till 2022.

Scheme Reach

- The scheme has a wide spread reach with training being conducted in almost all Indian States/ UTs etc. Around 3,250 training centers are present across different Indian States, cities and rural areas including remote location, backwards region, left wing extremist affected area etc.
- Out of the total 664 districts Indian districts, around 357 districts have been covered under the scheme and trainees from different strata of the society are the major beneficiaries.

GENERAL STUDIES-II

Topic– *Development processes and the development industry- the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders.*

HATHKARGHA SAMVARDHAN SAHAYATA (HSS) YOJANA

Context:

The Government of India, **Ministry of Textiles introduced the technology up-gradation scheme** under National Handloom Development Programme (NHDP) and Comprehensive Handloom Cluster Development Scheme (CHCDS) in 2015-16.

Key points:

This scheme, with some modifications, was named as **“Hathkargha Samvardhan Sahayata (HSS) Yojana”** in December 2016, for providing upgraded looms/accessories to handloom weavers to improve quality of fabric and enhance productivity.

- **Under HSS**, the Government of India bears 90% of the cost of looms/accessories.
- The scheme is designed for all the weavers, including SC/ST/OBC and women.

Who will get Benefits under the scheme?

- **A list of beneficiaries shall be prepared by the weavers service Centre** concerned in association with the implementing Agency and State Directorate of Handlooms concerned.
- Looms/ accessories shall be given only to those weavers who have undergone training in weaving in last 2 years under various Govt. programmes, including Block Level Clusters and are willing to contribute 10% of the cost.

GENERAL STUDIES-II

Topic– Various Security forces and agencies and their mandate.

NARCOTICS CONTROL BUREAU (NCB)

Context

Narcotics Control Bureau (NCB) affected multiple Pan-India operations wherein Mumbai emerged as major destination.

Context

Narcotics Control Bureau (NCB) affected **multiple Pan-India operations** wherein Mumbai emerged as major destination.

- NCB is an **Indian federal law enforcement and intelligence agency under the Ministry of Home Affairs, Government of India.**
- The agency is tasked with combating drug trafficking and the use of illegal substances under the provisions of Narcotic Drugs and Psychotropic Substances Act.
- **Established in 1986**, it is responsible for coordination with the Indian state governments and other central departments, implementation of India's international obligations with regard to drug trafficking, and assisting international and foreign drug law enforcement agencies.

Function

The chief purpose of the **Narcotics Control Bureau** is to fight drug trafficking on an all-India level.

- It works in close cooperation with the **Customs and Central Excise/GST, State Police Department, Central Bureau of Investigation (CBI), Central Economic Intelligence Bureau (CEIB) and other Indian intelligence and law enforcement agencies** both at the national and states level.
- The NCB also provides resources and training to the personnel of India's Drug Law Enforcement Agencies in fighting drug trafficking.
- The NCB also monitors India's frontiers to track down points where smuggling activities take place with foreign traffickers.

CHROME FACTS FOR PRELIMS:

ASEAN-INDIA HACKATHON 2021

1st ASEAN-India Hackathon 2021 concludes.

Highlights:

- The first-ever ASEAN-India Hackathon concluded on 4th February.

- The ASEAN-INDIA Hackathon is a 36 hours event involving 10 member nations (Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Laos, Myanmar, Cambodia and Vietnam) to collaborate in education, science and technology.
- It aims to forward their economic development through collaboration in education, science and technology and learn from each other's strengths and also get acquainted with each other's culture, values and work ethics.

Mahila E-Haats

- "Mahila E-haat", is an online marketing platform for women entrepreneurs.
- Government has promoted platforms such as **Government e-Market Place (GeM)** and e-market place managed by **National Small Industries Corporation (NSIC)** to support the entrepreneurs.

PIB-FEBRUARY 8th, 2021

GENERAL STUDIES-II

Topic– *Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.*

INDIA-EU HIGH LEVEL DIALOGUE

Context

The 1st High Level Dialogue (HLD) between **India and European Union**, was held on 5th February 2021.

- The establishment of this Dialogue was a major outcome of the **15th India-EU Leader's Summit** held in July 2020.
- The objective for HLD is to provide Ministerial level guidance towards the bilateral trade and investment relations.

Highlights of HLD:

- The Ministers emphasized **the importance of global cooperation and solidarity in a post COVID-19 era.**
- Agreed for further deepening of bilateral trade and investment relationship through a series of regular engagements, aiming at quick deliverable for the businesses in these tough times.
- The Ministers also agreed to meet within the next three months, with an objective for reaching consensus on a host of bilateral trade & investment cooperation issues viz. a **bilateral Regulatory Dialogue; an India-EU Multilateral Dialogue to explore further possibilities of cooperation; etc.**

15th India-EU Summit

The 15th bilateral **India- European Union (EU) Summit** was held on **July 15** via video conference.

Objective of Summit

- The Summit will review India-EU cooperation covering political & security relations, trade & investment and economic cooperation.
- The Summit is also expected to discuss developments around the Covid-19 pandemic and contemporary global matters of interest to both sides.
- The **14th India-EU Summit** was held on **6 October 2017** in **New Delhi**.

Highlights

- **Trade and investment** were the **main focus** of the 15th India-EU summit.
- There is no time frame set for the conclusion of the **Bilateral Trade and Investment Agreement (BTIA)** but both sides have agreed that the two ministers mandated to take the discussions forward should meet as early as possible.
- They underlined the need to **preserve safety and stability in the Indian Ocean**.

India- European Union (EU) trade relationship

- The EU is one of the largest investors in India with cumulative investment of over \$91 billion.
- The E.U. is India's largest trading partner and investor, and **accounts for 11% of India's global trade**.
- **Trade with India formed under 3% of the E.U.'s global trade**.
- In the India-EU summit in Delhi two years ago, the two sides could not close the gaps either.

Bilateral Trade and Investment Agreement (BTIA)

- **At the 7th India-EU Summit held in Helsinki on 13th October 2006** political leaders move towards negotiations for a broad-based trade and investment agreement on the basis of the report of India-EU High Level Technical Group.
- **In June 2007**, India and the EU began negotiations on a **broad-based Bilateral Trade and Investment Agreement (BTIA)** in Brussels, Belgium.

Challenges

- **The European Union is seeking an ambitious and comprehensive** bilateral trade and investment agreement (BTIA) with India and **not in favour of an early harvest pact** covering fewer areas.
- **India had in recent times exhibited a protectionist streak** – raising tariffs, speaking of self-reliance and reducing procurement opportunities for European firms.

Backstory

- Talks for the trade pact began in 2007 but was called off after many rounds in 2013.
- Though some technical level talks were held to break the logjam in 2017, there has been no progress to report.
- The **EU is India's largest trading partner despite "Brexit" or Britain's departure from the grouping** and the source of 90 billion euros in investment since 2000.
- In many ways India had moved backwards on several issues since the last round of talks in 2013 and some technical discussions in 2017.

Significance of HLD

- In a significant step forward, regular interactions for re-initiation of bilateral trade and investment agreements, with an interim agreement, to start with, were also discussed.
- The Ministers concluded with the confidence and commitment towards a renewed India-EU commercial and economic partnership reflecting full potential of bilateral commercial relations.

GENERAL STUDIES-III

Topic– *Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.*

NATIONAL SAFETY COUNCIL

Context

Shri **S. N. Subrahmanyam** has been appointed **Chairman of the National Safety Council** for a period of three years.

Bout the NSC:

National Safety Council (NSC) was set up by the **Ministry of Labour, Government of India (GOI)** on 4th March, 1966.

- It was established to generate, develop and sustain a voluntary movement on Safety, Health and Environment (SHE) at the national level.
- It is **an apex nonprofit making, tripartite body**, registered under the Societies Registration Act 1860 and the Bombay Public Trust Act 1950.

Activities:

- Organizing and conducting specialised training courses, conferences, seminars & workshops;
- Conducting consultancy studies such as safety audits, hazard evaluation & risk assessment;
- Designing and developing HSE promotional materials & publications;
- Facilitating organisations in celebrating various campaigns e.g. Safety Day, Fire Service Week, World Environment Day.

A computerized Management Information Service has been setup for collection, retrieval and dissemination of information on HSE aspects.

GENERAL STUDIES-III

Topic- *Issues related to direct and indirect farm subsidies and minimum support prices;*

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY) FOR 2021-22

Context

The Government of India has allocated Rs **16000 crores** for Pradhan Mantri Fasal Bima Yojana (PMFBY) for the fiscal year **2021-22**.

- The **scheme extends coverage** for the **entire cropping cycle** from **pre-sowing to post-harvest** including coverage for losses arising out of prevented sowing and mid-season adversities.

What is the PMFBY?

The PMFBY was **launched in 2016** and **replaces all the prevailing yield insurance schemes in India**. It replaced the **National Agricultural Insurance Scheme (NAIS)** and **Modified National Agricultural Insurance Scheme (MNAIS)**.

- The scheme has been launched **with an impetus on crop sector** and has **extended coverage under localized risks, post-harvest losses etc.**
- It aims at **adoption of technology** for the purpose of yield estimation.
- **The scheme is mandatory for farmers who have taken institutional loans from banks.**
- **It's optional for farmers who have not taken institutional credit.**

Objectives

Pradhan Mantri Fasal Bima Yojana (PMFBY) **aims at supporting sustainable production in agriculture sector** by way of –

- Providing **financial support to farmers suffering crop loss/damage** arising out of **unforeseen events.**
- **Stabilizing the income** of farmers to ensure their continuance in farming.
- Encouraging farmers **to adopt innovative and modern agricultural practices.**
- **It aims** to ensure flow of credit to the agriculture sector which contributes **to food security, crop diversification and enhancing growth and competitiveness of agriculture sector.**
- To protecting farmers from production risks.

KEY FEATURES OF PMFBY

Uniform Premium

It envisages a uniform premium of only **2% to be paid by farmers for Kharif crops**, and **1.5% for Rabi crops**. The premium for annual **commercial and horticultural crops will be 5%**.

Use of Technology

- The new scheme envisages utilizing innovative technologies like satellite imagery, vegetation indices etc.
- The mandatory usage of smart phones / hand held devices for increasing the speed and accuracy during yield estimation.
- In order to minimize the area discrepancy in coverage, the scheme also promotes the digitization of land records.

Better Coverage

- Pradhan Mantri Fasal Bima Yojana (PMFBY) aims at covering the losses suffered by farmers due to reduction in crop yield as estimated by the local appropriate government authorities.
- The scheme also covers pre sowing losses, post-harvest losses due to cyclonic rains and losses due to unseasonal rainfall in India.
- There is a provision to cover losses due to localized calamities such as inundation also in addition to the previously covered hailstorm and landslide risks.

Significance

The scheme was conceived as a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.

- As an **end to end risk mitigation mechanism** for farmers, the scheme extends coverage for the **entire cropping cycle from pre-sowing to post-harvest** including coverage for losses arising out of prevented sowing and mid-season adversities.
- Individual farm level losses arising out of localized calamities and post-harvest losses are also covered due to perils such as **inundation, cloudburst and natural fire**.

CHROME FACTS FOR PRELIMS

REANMEING OF AKASHVANI SANGEET SAMMELAN

- The prestigious Akashvani Music Festival, will hereinafter be named after **Bharat Ratna Pandit Bhimsen Joshi**.
- It will be called **Bharat Ratna Pandit Bhimsen Joshi Akashvani Sangeet Sammelan**.
- Pandit Bhimsen Joshi was born on 4 February 1922 at **Gadag, then part of Dharwad district of Karnataka**.
- Pandit Bhimsen Joshi was conferred the **Bharat Ratna award in 2009**.

GENERAL STUDIES - III

Topic– *Conservation, environmental pollution and degradation, environmental impact assessment.*

WORLD SUSTAINABLE DEVELOPMENT SUMMIT 2021

Context

The World Sustainable Development Summit 2021 will be starting on 10th February.

The theme of the Summit: ‘Redefining our common future: Safe and secure environment for all’.

About the Summit 2021

The 20th edition of The **Energy and Resources Institute’s (TERI)** flagship event, will be held online from 10th-12th February, 2021.

- The Summit will bring together a wide number of governments, business leaders, academicians, climate scientists, youth, and the civil society in the fight against climate change.

Key partners of the Summit:

1. India’s Ministry of Environment, Forests and Climate Change,
2. Ministry of New and Renewable Energy and
3. Ministry of Earth Sciences

About WSDS

The World Sustainable Development Summit (WSDS) is the **annual flagship event of The Energy and Resources Institute (TERI).**

- **Instituted in 2001**, the Summit series has marked 20 years in its journey of making ‘sustainable development’ a globally shared goal.
- The Summit series has established itself as a responsible and **an effective platform for mobilizing opinion-makers** to identify and advance pioneering actions to address some of the most relevant issues concerning sustainable development.

Objective:

- **Post the adoption of the Sustainable Development Goals** and the **signing of the Paris Agreement**, the World Sustainable Development Summit aims **to provide long-term solutions** for the benefit of the global community.

- For this, WSDS assembles the **various stakeholders on a single platform** and initiating a step in the direction of achieving constructive action in combating issues pertinent to the future of humanity.

About TERI:

The Energy and Resources Institute (TERI) is an **independent, multi-dimensional organization** and a research institute in New Delhi.

- It specializes in the **fields of energy, environment and sustainable development**.
- **Established in 1974**, it was formerly known as the **Tata Energy Research Institute**.
- It was renamed The **Energy and Resources Institute in 2003**.

TERI's work across sectors is focused on:

1. Promoting efficient use of resources
2. Increasing access and uptake of sustainable inputs and practices
3. Reducing negative impact on environment and climate

GENERAL STUDIES - III

Topic— *Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.*

'PROMOTION OF AGRICULTURAL MECHANIZATION FOR IN-SITU MANAGEMENT OF CROP RESIDUE'

Context:

Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of **Punjab, Haryana, Uttar Pradesh and NCT of Delhi**'.

About the scheme:

- **To support the efforts of the governments of Haryana, Punjab, Uttar Pradesh and the NCT of Delhi** to address air pollution, an announcement was made in Budget 2018 regarding a special Scheme.
- In pursuance of this, to subsidize machinery required for **in-situ management of crop residue**, a Central Sector Scheme (**100% funded by the Central Government**) on '**Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi**' has been implemented during 2018-19 and 2019-20.

Objectives:

- To protect environment from air pollution;
- Prevent loss of nutrients and soil micro-organisms caused by burning of crop residue;

- Promoting in-situ management of crop residue by retention and incorporation into the soil through the use of appropriate mechanization inputs;
- Creating awareness among stakeholders through demonstration and capacity building activities;
- Differentiated Information, Education and Communication strategies for effective utilization and management of crop residue.

Impact of this scheme:

This Scheme was further **extended for the year 2020-21**.

- The **residue burning events in 2020 in Punjab, Haryana and UP together** have reduced by -30% as compared to 2016.
- In Punjab the reduction is -22.7%, Haryana – 63.8% and UP – 52.01%.

GENERAL STUDIES - I

Topic– *Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.*

PRESERVING AND PROMOTING THE TRADITIONAL CULTURAL HERITAGE OF INDIA

Context:

Measures taken by Government to preserving and promoting the traditional cultural heritage of India.

Institutions' engagement:

Following institutions of Ministry of Culture are engaged in the work of preserving and promoting the traditional cultural heritage of India.

- Sangeet NatakAkademi (SNA),
- Centre for Cultural Resources and Training (CCRT),
- Kalakshetra Foundation (KF),
- Indira Gandhi National Centre for the Arts (IGNCA),
- National School of Drama (NSD),
- Sahitya Akademi (SA), and
- Lalit Kala Akademi (LKA).

Scheme for Safeguarding the Intangible Heritage and Diverse Cultural Traditions of India

- The Ministry of Culture formulated this scheme with the objective of reinvigorating and revitalizing various institutions, groups, individuals etc.
- The aim to engage them in activities/ projects for strengthening, protecting, preserving and promoting the rich **Intangible Cultural Heritage (ICH)** of India.

National list of Intangible Cultural Heritage (ICH):

- The National list of ICH of India is an attempt **to recognize the diversity of Indian Culture embedded in its Intangible Heritage.**
- **It aims to** raise awareness about the various Intangible Cultural Heritage elements from different states of India at National and International level and ensure their protection.

Classification of ICH list:

Following **UNESCO's 2003 Convention for the Safeguarding of the Intangible Cultural Heritage**, this list has been classified into **five broad domains** in which Intangible Cultural Heritage is manifested:

1. Oral traditions and expressions, including language as a vehicle of the Intangible Cultural Heritage
2. Performing Arts
3. Social practices, Rituals and Festive events
4. Knowledge and practices concerning Nature and the Universe
5. Traditional Craftsmanship.

GENERAL STUDIES - II

Topic– *Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes and betterment of these vulnerable sections.*

GARIB KALYAN ROJGAR ABHIYAAN

Context

The Union Government has launched a rural public works scheme 'Garib Kalyan Rojgar Abhiyaan' (GKRA) on 20th June, 2020 with a resource envelop of Rs.50,000 crore, to boost employment and livelihood opportunities for returnee migrant workers and similarly affected citizens in rural area, in the wake of COVID-19 pandemic.

About

- Garib Kalyan Rojgar Abhiyaan aims **to reduce economic impact faced by the rural parts of the country due to nationwide lockdown** by providing livelihood support to the rural citizens, especially for the migrant workers.
- The Central Government **has set up a target of 125 days** for achieving the targets under the scheme in 116 districts across the country.
- It will bring together about **25 schemes under the Garib Kalyan Rojgar Abhiyan.**

The salient features of the scheme are:

- The scheme will empower and provide livelihood opportunities to the Migrant workers and rural citizens who had returned to their home states due to the Covid-19 induced lockdown.

- This campaign will work in mission mode for 125 days with an outlay of Rs. 50,000 crore.
- A total of 116 districts across six states from **Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand and Odisha** have been chosen for the campaign.
- These districts are estimated to cover about 2/3 of such migrant workers.
- The villages across 116 districts in the six States will join this programme through the **Common Service Centres and Krishi Vigyan Kendras**.
- It is to maintain the norms of social distancing in the wake of the Covid-19 pandemic.

Implementation

The Abhiyaan will be a **coordinated effort between 12 different Ministries / Departments**. These are:

Rural Development, Panchayati Raj, Road Transport & Highways, Mines, Drinking Water & Sanitation, Environment, Railways, Petroleum & Natural Gas, New & Renewable Energy, Border Roads, Telecom and Agriculture.

CHROME FACTS FOR PRELIMS

MALABAR NAVAL EXERCISES

The Malabar series of exercises **began as an annual bilateral naval exercise between India and the US in 1992.**

- **Japan joined the Naval Exercises in 2015.** Malabar 2020 saw the participation of the **Australian Navy**
- **The 24th edition of Malabar maritime exercise, hosted by Indian Navy in 2020,** witnessed the participation by **Indian Navy, United States Navy, Japan Maritime Self Defence Force and Royal Australian Navy.**
- The Malabar Naval exercises enhanced synergy, interoperability and coordination between the four country navies.

PIB-FEBRUARY 10th, 2021

GENERAL STUDIES - III

Topic– Important Geophysical phenomena such as Earthquakes, Tsunami, Volcanic activity, Cyclone etc., geographical features and their location- changes in critical geographical features and in flora and fauna and the effects of such changes.

NATIONAL MONSOON MISSION (NMM)

Context

Under the Monsoon Mission, **Ministry of Earth Science**, has developed the state-of-the-art weather and climate prediction models, which are now in operational use.

- These models include **models for short range to medium range (1-10 days), extended range (10days to 30 days) and seasonal (up to one season).**
- The models developed under the National Monsoon Mission (NMM) have shown very high skill in predicting important weather events on different time scales during the last 3 years.

What is the 'National Monsoon Mission'?

Ministry of Earth Sciences (MoES), has launched '**National Monsoon Mission' (NMM)** with a vision **to develop a state-of-the-art dynamical prediction system for monsoon rainfall** on different time scales.

- It was launched in 2012.
- MoES has bestowed the **responsibility of execution and coordination** of this mission to the **Indian Institute of Tropical Meteorology (IITM), Pune.**

Objectives:

- To improve Seasonal and Intra-seasonal Monsoon Forecast
- To improve Medium Range Forecast.

Participating Institutions:

- Indian Institute of Tropical Meteorology, Pune
- National Centre for Medium Range Weather Forecast, Noida
- India Meteorological Department, New Delhi

Targets of Monsoon Mission:

- Development of a **seamless prediction system using monsoon mission model, on different time scales**, like Seasonal (for whole Monsoon season), Extended range (up-to 4 weeks), Short range prediction (up-to 5days).
- **Initiate and coordinate working partnership** between Indian and foreign institutes to develop a system for prediction of extremes and climate applications.
- **Develop and implement system for climate applications** having social impacts (such as agriculture, flood forecast, extreme events forecast, wind energy, etc.)
- **Advanced data assimilation system** for preparing high quality data for model predictions.

Background:

El Nino and Southern Oscillation (ENSO) being a dominant mode of global inter-annual variability and due to its vast influence on other regional climates.

- In last few decades researchers have made large number of studies on the ENSO phenomena and its various impacts using atmospheric and ocean-atmosphere coupled general circulation models.
- In recent decades, dynamical numerical models have considerably improved and most of the global coupled models have shown good prediction skill of ENSO SST with six months lead time.

Need for NMM:

The seasonal mean rainfall hind cast skill, at one season lead time, over the central Pacific is also very good.

- This has been possible due to a concerted effort by a group of devoted scientists.
- However, not **much breakthrough has taken place in improving the prediction skill of Indian summer monsoon rainfall**, even though it was expected as a prominent heat source over Indian region during summer monsoon period that drives the major atmospheric circulations.

GENERAL STUDIES-III

Topic– *Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

COMPANIES FRESH START SCHEME (CFSS), 2020

Context

4,73,131 number of Indian Companies and 1,065 number of Foreign Companies have been benefited by availing the Companies Fresh Start Scheme (CFSS), 2020.

What is “Companies Fresh Start Scheme”?

“Companies Fresh Start Scheme, 2020” is a **scheme which will give a chance to enable companies to make good of any filing-related defaults, irrespective of the duration of default**, and make a fresh start as a fully compliant entity.

Beneficiaries:

- Under the scheme **all the defaulting companies**, who have made a default in filing necessary documents and forms with ROC will be able to get the benefit.
- Also, the **companies who have been prosecuted against such default** may be able to get the immunity from such prosecutions.

Who are defaulting companies?

The companies that **made default in payment or filing of any document**, statement or return etc are said to be the defaulting companies.

CFSS 2020 is Not Applicable if:

- The final notice for removing the company name from The Companies Act 2013 has already been issued by the concerned authority.
- If the company has already applied for removing the name of the company by filing STK-2 along with prescribed fees with Registrar of Companies (ROC).

- Companies have merged under some arrangement or compromise.
- Companies that are marked for the Corporate Insolvency Resolution Process or Liquidation.

GENERAL STUDIES-III

Topic– *Science and Technology- developments and their applications and effects in everyday life.*

ARTIFICIAL INTELLIGENCE (AI)

Context

An Artificial Intelligence (AI) powered learning ecosystem that will assist the banking, financial services and insurance (BFSI) sector: Commerce and Industry & Railways Minister

What is Artificial intelligence (AI)?

Artificial intelligence (AI) is **the simulation of human intelligence processes by machines, especially computer systems.**

- Specific applications of AI include expert systems, natural language processing (NLP), speech recognition and machine vision.
- **The term was coined in 1956 by John McCarthy** at the Dartmouth conference, Massachusetts Institute of Technology.

AI programming focuses on three cognitive skills: learning, reasoning and self-correction.

Learning processes

- This aspect of AI programming focuses on **acquiring data and creating rules for how to turn the data into actionable information.**
- The rules, which are called **algorithms**, provide computing devices with **step-by-step instructions** for how to complete a specific task.

Reasoning processes

- This aspect of AI programming focuses on **choosing the right algorithm to reach a desired outcome.**

Self-correction processes

- This aspect of AI programming is designed to **continually fine-tune algorithms** and ensure they provide the most accurate results possible.

Advantages of artificial intelligence

Artificial neural networks and deep learning artificial intelligence technologies are quickly evolving.

- It's primarily because **AI processes large amounts of data much faster and makes predictions more accurately than humanly possible.**
- While the huge volume of data that's being created on a daily basis, AI applications that use machine learning **can take that data and quickly turn it into actionable information.**

Disadvantages of AI

The primary disadvantage of using AI is that **it is expensive to process the large amounts of data that AI programming requires.**

- **AI technologies falling into terrorist hands may unleash modern terror network** including machine and therefore vulnerability of humans may magnify.
- **It may lead to moral degradation in society** due to decreased human to human interactions.
- The **decrease in demand for human labour** due to machines and intelligent robots taking over the jobs in the manufacturing and the services sectors.

Artificial intelligence in India

As per **Global AI Report 2019**, India stood at the ninth position in terms of the number of the AI specialists working in the field.

- The US, China and the UK topped the list.
- **IIT Hyderabad has launched a full-fledged Bachelor of Technology (B Tech) program** in AI becoming the first Indian educational institution to do so.
- Defence forces of India are now venturing into the products and technologies which will aid defence measures using the AI and technologies.
- **It is estimated that AI will add 957 billion dollars to India's GDP by the year 2035** boosting India's annual growth by 1.3% points.

Benefits of AI in India

NITI Aayog estimates that adopting AI means a 15% boost for **the gross value added (GVA) for the economy by 2035.**

- India still has a conventional policing. **AI based products open a new window of opportunity to do predictive policing in India.**
- With the help of AI, **one can predict the pattern of crime**, analyze lot of CCTV footage which are available across the country to identify suspects.
- AI can increase **access and affordability of quality healthcare.**
- **In agriculture**, it can contribute towards enhancing farmers' income, increase farm productivity and reduce wastage.
- **Develop smarter and safer modes of transportation** to address traffic and congestion problems.
- **'Make in India' programme** can be strengthened and help India in becoming a major manufacturing hub with AI-assisted technology.

CHROME FACTS FOR PRELIMS

LALANDAR “SHATOOT” DAM

India and Afghanistan signed a memorandum of understanding (MoU) for **the construction of the Lalandar (Shatoot) Dam in Afghanistan.**

Shahtoot Dam is a proposed dam in the **Kabul river basin**, one of the five river basins in Afghanistan.

- The project is a **part of the New Development Partnership** between India and Afghanistan.
- The **Lalander dam** would meet the safe drinking water needs of **Kabul City**, provide irrigation water to nearby areas, rehabilitate the existing irrigation and drainage network and also provide electricity to the region.
- This is **the second major dam being built by India in Afghanistan**, after the **India-Afghanistan Friendship Dam (Salma Dam)** was inaugurated in June 2016.

National Research Centre for Makhana

- ICAR-National Research Centre (NRC) for Makhana, **Darbhangha (Bihar)** was sanctioned by the Department of Agricultural Research & Education.
- **Darbhangha** in particular and **Mithila** in general is **major Makhana producing region** in the country.

PIB-FEBRUARY 11th, 2021

GENERAL STUDIES- II

Topic– Parliament and State Legislatures – structure, functioning, conduct of business, powers & privileges and issues arising out of these.

PRESIDENT’S ADDRESS AND MOTION OF THANKS

Context:

PM’s replied to the motion of thanks on the President’s Address in Lok Sabha.

President’s Address:

Article 86(1) of the Constitution provides that the President may address either House of Parliament or both Houses assembled together, and for that purpose require the attendance of members.

Article 87 provides for the special address by the President.

- Clause (1) of that article provides that at **the commencement of the first session after each general election to the House of the People and at the commencement of the first**

session of each year, the President shall address both Houses of Parliament assembled together and inform Parliament of the causes of its summons.

- Such an Address is called '**special address**'; and it is also an annual feature.
- **No other business is transacted till the President has addressed both Houses of Parliament** assembled together.

Contents of the Address:

The President's Address is the **statement of policy of the Government** and, as such, **is drafted by the Government which is responsible for its contents.**

- The Address **contains a review of various activities and achievements of the Government** during the previous year.
- It sets out the **policies, projects and programmes which Government of the day wishes to pursue** with regard to the important national and international issues.
- The Address also indicates, in broad terms, items of legislative business which are proposed to be brought during the sessions to be held in that year.

Discussion on the Address by Motion of Thanks

The President's address to a joint sitting of Parliament followed by a **motion of thanks** moved in each House by ruling party MPs.

- During the session, political parties discuss the motion of thanks also suggesting amendments.
- The members cannot refer to matters which are not the direct responsibility of the Central Government and that the name of the President cannot be brought in during the debate since the Government and not the President is responsible for the contents of the Address.

Amendments to the "Motion of Thanks":

- Notices of amendments to Motion of Thanks on the President's Address can be tabled after the President has delivered his Address.
- **Amendments may refer to matters contained in the Address** as well as to matters, in the opinion of the member, the Address has failed to mention.
- Amendments can be moved to the Motion of Thanks in such form as may be considered appropriate by the Speaker.

Passage of 'Motion of Thanks':

- Members of Parliament vote on this motion of thanks. This motion **must be passed in both of the houses.**
- A **failure to get motion of thanks passed amounts to defeat of government** and leads to collapse of government.
- Therefore, the Motion of Thanks is deemed to be a no-confidence motion.

GENERAL STUDIES- II

Topic– Major crops – cropping patterns in various parts of the country, different types of irrigation and irrigation systems – storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

WORLD PULSES DAY

The World Pulses Day falls on **February 10 every year and recognised Pulses as a global food.**

History and significance:

- The **UN General Assembly after recognizing the value of pulses in 2013**, adopted 2016 as the **International Year of Pulses (IYP)**.
- As the **International Year of Pulses** succeeded Burkina Faso (a landlocked country in West Africa) proposed the observance of World Pulses Day.
- **In 2019**, the General Assembly announced **February 10 as the World Pulses Day**.

World Pulses Day 2021 Theme: LovePulses.

Benefits of pulses:

- Pulses are rich in **nutritional and protein values** and are an important part of a healthy diet.
- **Pulses, and legumes** (lentils, peas, chickpeas, beans, soybeans, and peanuts) play an equally important role in health maintenance and overall improvement.
- Pulses also contribute majorly to achieving the goals of the **2030 Agenda of Sustainable Development**.
- Pulses play a **critical role in marking challenges of poverty, food chain security, degraded health, and climate change**.
- Pulses and legume crops help in improving the feasibility of agricultural production systems.
- Pulses contribute to environmental benefits.
- The **nitrogen-fixing properties of pulses improve soil fertility**, which increases the productivity and fertility of the farmland.

GENERAL STUDIES- II

Topic– *Infrastructure: Energy, Ports, Roads, Airports, Railways etc.*

MAJOR PORT AUTHORITIES BILL, 2020

Context:

Parliament has passed landmark Major Port Authorities Bill, 2020.

Background:

The Major Port Authorities Bill 2020 bill **aims at decentralizing decision making and to infuse professionalism in governance of major ports.**

- It imparts faster and transparent decision making benefiting the stakeholders and better project execution capability.
- **The Bill is aimed** at reorienting the governance model in central ports to landlord port model in line with the successful global practice.

The salient features of the Major Port Authorities Bill 2020 are as under:

- The Bill is more compact in comparison to the **Major Port Trusts Act, 1963** as the number of sections has been reduced to 76 from 134 by eliminating overlapping and obsolete Sections.
- The new Bill has proposed a **simplified composition of the Board of Port Authority** which will comprise of 11 to 13 Members from the present 17 to 19 Members representing various interests.
- The role of **Tariff Authority for Major Ports (TAMP)** has been redefined.
- **Port Authority** has now been given powers to fix tariff which will act as a reference tariff for purposes of bidding for PPP projects.
- **PPP operators** will be free to **fix tariff- based on market conditions**.
- In the present **MPT Act, 1963** prior approval of the Central Government was required in 22 instances.
- The Board of each Major Port shall be entitled to create specific master plan in respect of any development or infrastructure.
- Provisions of **CSR & development of infrastructure by Port Authority** have been introduced.
- Provision has been made for safeguarding the pay & allowances and service conditions including pensionary benefits of the employees of major ports.

Significance:

This will empower the Major Ports to perform with greater efficiency on account of full autonomy in decision making and by modernizing the institutional framework of Major Ports.

GENERAL STUDIES- II

Topic- *Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.*

PRODUCTION LINKED INCENTIVE SCHEME

Context:

Government has approved inclusion of 'Specialty Steel' under the **Production Linked Incentive (PLI) Scheme**.

- It aims to promote the **manufacturing of 'Specialty Steel' within the country** by attracting capital investment, generate employment and promote technology up-gradation in the steel sector.
- This would help in improving availability of 'Specialty Steel' in the country by making the country Atmanirbhar in meeting the domestic demand.

What is the Specialty Steel?

Specialty steels – also referred to as **alloy steel** – contain additional alloyed materials that deliver special properties to the final product. Specialty steels are **engineered to provide superior performance under specific conditions**.

What is PLI scheme?

Production Linked Incentive Schemes (PLI Scheme) **are an outcome- and output-oriented scheme where incentives will be paid only if the manufacturers make the goods.**

- These schemes provide **the cash incentives for five to seven years and all the sunrise and important sectors** are proposed to be covered in this.
- **The sectors** includes automobile, networking products, food processing, advanced chemistry and solar PV manufacturing.

Key features of the scheme:

- The scheme shall extend an incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India and covered under target segments, to eligible companies, **for a period of five (5) years with financial year (FY) 2019-20 considered as the base year for calculation of incentives.**
- The Scheme will be implemented through a Nodal Agency which shall act as a **Project Management Agency (PMA)** and be responsible for providing secretarial, managerial and implementation support and carrying out other responsibilities as assigned by MeitY from time to time.

Eligibility

- All electronic manufacturing **companies which are either Indian or have a registered unit in India** will be eligible to apply for the scheme.
- These companies can either create a new unit or seek incentives for their existing units from one or more locations in India.
- Any **additional expenditure incurred by companies on plant, machinery, equipment, research and development and transfer of technology** for manufacture of mobile phones and related electronic items will be eligible for the incentive scheme.
- However, all **investment done by companies on land and buildings for the project will not be considered** for any incentives or determine eligibility of the scheme.

Significance

The scheme, will on one hand attract big foreign investment in the sector, while also encouraging domestic mobile phone makers to expand their units and presence in India.

Mains Questions:

How the initiative like 'Production Linked Incentive Scheme (PLI)' can boost the Indian Economy? Discuss.

TECHNOLOGY INFORMATION, FORECASTING AND ASSESSMENT COUNCIL (TIFAC)

TIFAC is an autonomous organisation of Department of Science & Technology, celebrated its **34th Foundation Day**.

- **The theme of the Foundation day was:** "Technology, Innovation and Economy for Aatma Nirbhar Bharat".
- TIFAC is an autonomous organization **set up in 1988** under the Department of Science & Technology.
- It look ahead in technology domain, assess the technology trajectories, and support innovation by networked actions in select areas of national importance.

PIB-FEBRUARY 12th, 2021

GENERAL STUDIES-III

Topic– Major crops – cropping patterns in various parts of the country, different types of irrigation and irrigation systems – storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

MISSION ORGANIC VALUE CHAIN DEVELOPMENT FOR NORTH EASTERN REGION (MOVCDNER)

Context:

MOVCDNER, is instrumental in bringing a definitive change in the lives of the organic growers in the North Eastern Region.

About MOVCDNER:

Mission Organic Value Chain Development for North East Region (MOVCD-NER) is a **Central Sector Scheme**, a sub-mission under **National Mission for Sustainable Agriculture (NMSA)**.

- It was launched by the **Ministry of Agriculture and Farmers Welfare**.
- It is being implemented in the states of **Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura**, during the 12th plan period.
- The scheme entails creation of 100 FPO/FPC across the eight states comprising a total area of 50000 Hectare.

Objectives:

- **The scheme aims** to development of certified organic production in a value chain mode to link growers with consumers.

- To support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing, marketing and brand building initiative.

Key features of the scheme:

MOVCDNER, is instrumental in bringing a definitive change in the lives of the organic growers in the region.

- The scheme, provides end to end support to the farmers from **farm to fork** including quality production, and direct market linkages to national and international markets.
- Transformation of farmer clusters into **Farmer Producer Companies (FPCs)**.
- **Through the FPCs**, farmers are achieving economies of scale, engaging bulk buyers and breaking off their dependencies on the traders/middlemen for market linkages.
- Under MOVCDNER, **the FPCs get access to shared infrastructure** including collection centres, and allowing them to add value to their produce and market them well.
- The **farmer-industry connect** facilitated through professional project management team under the scheme has also witnessed a remarkable turnaround in the last 5 years.

Background:

India's North-East region has witnessed a **very limited use of agro-chemicals** with farmers using traditional methods and on-farm inputs for farming.

- The region is also characterized by **a diverse agro-ecological zones**, variable terrain and sufficient rainfall to support a wide variety of fruit, grain and spice crops.
- MOVCD-NER scheme was **conceptualized to explore this untapped potential for organic** in the region.

Significance:

Emerging demand for **safe and healthy organic food with added flavour of being grown in pristine environment and virgin soils of India's North Eastern states** is fast emerging as unique opportunity to the farmers of the region.

The disadvantage of not being able to pick up green revolution is now proving a boon and region with its renewed vigour on modern organic agriculture is poised to become hub for organic production of its unique heritage crops.

GENERAL STUDIES-II

Topic– *Welfare schemes for vulnerable sections of the population by the Centre and States.*

NATIONAL BEEKEEPING & HONEY MISSION (NBHM)

Context:

National Beekeeping & Honey Mission (NBHM) aims to achieve the goal of 'Sweet Revolution' as part of Atmanirbhar Bharat Abhiyaan.

11 projects of Rs. 2560 lakhs have been sanctioned under NBHM.

Bout the NBHM:

NBHM was launched in August 2017 in line with Prime Minister's call for 'Sweet Revolution' (revolution in production of honey to increase its production).

The NBHM is carried out by

- Khadi and Village Industries Commission (KVIC)
- National Bee Board (NBB)

Objective of the Mission

The main objective of NBHM are:

- To promote holistic growth of beekeeping industry for income & employment generation for farm and non-farm households,
- To enhance agriculture/ horticulture production, developing infrastructural facilities,
- Setting up of Integrated Beekeeping Development Centre (IBDC)s/CoE, honey testing labs, bee disease diagnostic labs, custom hiring centres, Api-therapy centres, nucleus stock, bee breeders, etc. and
- Empowerment of women through beekeeping.

NBHM under the KVIC

The unorganised and the traditional methods of beekeeping were suspended with the establishment of the Khadi Village and Industry Committee (KVIC).

The Committee plays a vital role in the livelihood of the rural areas with its **four features rendering the upliftment of beekeepers' social and economic living standards.**

1. KVIC acts liaison as an income-generating tool for the beekeepers and beekeeping.
2. KVIC ensures better food and medicine with the value of honey production and other hive products.
3. KVIC supports cross-pollination that pays the way for agriculture crops.
4. KVIC works enormously in constructing afforestation.

National Bee Board (NBB)

- **The Ministry of Agriculture, Department of Agriculture Cooperation & Farmer's Welfare** established the National Bee Board (NBB) in the year 2000.
- The main motto of the board is to improve pollination and crop productivity through beekeeping.

Key Functions of NBB

- Research and Development of honey processing units
- Production of quality honey
- The innovation of Phyto-Sanitary standards in terms of Bee-Product quality
- Migration of honeybee colonies

- Creating awareness and organising training
- Research and training on the disease-prone and its medication.

Funds under NBHM Mission

- All the Micro, Small and Medium Enterprises governed by the national bodies approve fund every year through the KVIC.
- The amount is allocated for the employment and income to rural youth, both men and women for preserving the honeybee environment.

Sweet Revolution (Mithi Kranti)

- Sweet Revolution was envisioned in 2016 as a strategic step to emphasize the increase in honey production in the state, which can be a major contributor to doubling the income of the farmers.
- With the increase in income, the production of crops will also increase by 15%.

Purpose of sweet revolution

- **To make Jharkhand state in the category of developed states by 2022.**
- Providing employment by connecting the farmers of the state with bee keeping.
- To increase agriculture and horticulture yield and income of farmers.
- To make the state the leading state in the field of honey production.
- Children free from malnutrition.

Mains Question:

The Sweet Revolution (Mithi Kranti) is envisioned to make farmer's income double. How it will do that? Explain the key features of 'Sweet revolution'.

GENERAL STUDIES-II

Topic— *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

NATIONAL COAL INDEX

Context:

Ministry of Coal has started Commercial Auction of coal mines on revenue share basis.

In order to arrive at the revenue share based on market prices of coal, one **National Coal Index (NCI)** was conceptualized.

What is the NCI?

National Coal Index is being **developed by the Ministry of Coal** in pursuance of the recommendations of the **High Powered Expert Committee (HPEC)** constituted to study the challenges and efficacies of fixed bid system.

The NCI is a **price index** which reflects the change of price level of coal on a particular **month** relative to the fixed base year.

- The **base year for the NCI** is FY 2017-18.
- NCI has been rolled out on **4th June 2020** and the same is placed on the website of the Ministry of Coal.

Objective of NCI:

The objective is to develop a National Coal Index to reflect the movement of price of coal in the domestic coal market.

The aim is to have an index that will truly reflect the market price of coal since presently the coal market is dominated by **Public Sector CIL and SCCL**.

The other purpose are:

- For taxation purpose, the Coal Index will be the base indicator.
- For future calculation of upfront amount and intrinsic value of mine, this Index will be helpful.
- For calculation of annual escalation (monthly payment) this index can be basis.

Key features of NCI:

Prices of coal from all the sales channels of coal, including import, as existing today **are taken into account for compiling the NCI**.

- The **amount of revenue share per tonne of coal** produced from auctioned blocks would be arrived at using the NCI by means of defined formula.
- NCI is composed of a **set of five sub-indices**: Three for Non Coking Coal and two for Coking Coal.
- The **three sub-indices for Non Coking Coal** are combined to arrive at the Index for Non Coking Coal and the **two sub-indices for Coking Coal** are combined to arrive at the Index for Coking Coal.
- Thus, **indices are separate for Non-coking and Coking Coal**.

GENERAL STUDIES-III

Topic– Conservation, environmental pollution and degradation, environmental impact assessment.

INDIA'S FIRST CNG TRACTOR

Context:

India's first-ever diesel Tractor, **converted to CNG**, will be formally launched by the Union Minister for Road Transport and Highways.

Such tractors **could save as much as Rs.one lakh rupees annually on fuel costs** for farmers.

Important benefits of conversion to CNG are:

1. **It is a Clean Fuel** as it has the lowest content of carbon and other pollutants.
2. **It is Economical** as it has zero lead and is non-corrosive, non-dilutive and non-contaminating which helps in increasing the life of the engine and it requires less regular maintenance.
3. **It is Cheaper as CNG prices** are far more consistent than fluctuating Petrol prices; also the **average mileage of CNG vehicles is better than that** of Diesel/Petrol driven vehicles.
4. **It is Safer** as CNG tanks come with a tight seal, which reduces the possibility of explosion while refueling or in the event of a spill.
5. **It is the Future** as at present around 12 million vehicles are already powered by natural gas throughout the world and more companies & municipalities are joining the CNG movement every day.
6. **It is part of Waste to Wealth as stubble (Parali)** can be used as a raw material for producing Bio-CNG which will help the farmers to earn money by selling it to the Bio-CNG production units in their locality.

Specific benefits for farmers are:

- The test reports indicates that the retrofitted tractor produces more power/equal in comparison to Diesel-run engine.
- Overall emissions are reduced by 70% as compared to Diesel.
- It will help farmers to save up to 50% on the fuel cost as the current Diesel prices are Rs.77.43/L whereas CNG is only Rs.42/kg.

CHROME FACTS FOR PRELIMS:

UNANI DAY - 2021

World Unani Day is observed on February 11 every year.

- It is celebrated on the **birth anniversary of great Unani scholar and social reformer Hakim Ajmal Khan.**
- The day is marked to spread awareness about health care delivery through the Unani system of medicine.
- The Unani system of medicine was **originated in Greece**, however, its present form was saved by the Arabs.
- It is a preventive and curative philosophy that has been used in India for many years.
- India is one of the leading countries as far as the practice of Unani medicine **which was introduced in India by the Arabs and Persians.**

Hakim Ajmal Khan:

- He was the **Unani medical educationist and founder of scientific research in the Unani System of Medicine.**
- He was a great scholar, a social reformer, a **noted freedom fighter** and a genius.

Plan to grow vegetables in Anganwadi Centres

- A programme to support development of **Poshan Vatikas** at Anganwadi centers to meet **dietary diversity gap** has been put in place.
- It aims to **encourage community members to cultivate local food crops for regular supply** of fresh fruits, vegetables and important herbs and medicinal plants that are basic to good nutrition.
- As part of an outreach plan, seasonal and topical vegetable seeds were distributed to Anganwadi Centres.

PIB-FEBRUARY 13th, 2021

GENERAL STUDIES- II

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

SOIL HEALTH CARD SCHEME

Context:

Soil Health Card Scheme have been implemented in 32 States and UTs.

Soil Health Card scheme

The Soil health card Scheme was launched by the **Ministry of Agriculture and Farmers' Welfare** on **December 5, 2015**.

- **Under the scheme**, village level Soil Testing Labs will be setting up by youth having education in agriculture, Women Self Help Groups, FPOs etc.
- SHC scheme also focus on enabling employment generation after appropriate skill development.

What is the Soil Health Card (SHC)?

- SHC is a printed report that a farmer will be handed over for each of his holdings.
- **Soil Health Card provides two sets of fertilizer recommendations for six crops including recommendations of organic manures.**

It will contain the status of his soil with respect to **12 parameters**, namely:

N,P,K (Macro-nutrients);

S (Secondary- nutrient);

Zn, Fe, Cu, Mn, Bo (Micro – nutrients); and

pH, EC, OC (Physical parameters).

Objective of SHC

- A SHC is meant to give each farmer soil nutrient status of his/her holding.

- Advise him / her on the dosage of fertilizers and also the needed soil amendments that s/he should apply to maintain soil health in the long run.

Soil sample and testing

- Soil samples will be drawn in a grid of 2.5 ha in irrigated area and 10 ha in rain-fed area with the help of GPS tools and revenue maps.
- **Soil Samples are taken generally two times in a year**, after harvesting of Rabi and Kharif Crop respectively or when there is no standing crop in the field.
- Soil Samples will be collected by a trained person from a depth of 15-20 cm by cutting the soil in a "V" shape.
-
- It will then be transferred to soil test laboratory for analysis.

What is a soil test laboratory?

It is a facility for testing the soil sample for 12 parameters. This facility can be static or mobile or it can even be portable to be used in remote areas.

At the laboratories of the Science Colleges/Universities by the students under supervision of a Professor/ Scientist.

Significance of SHC

The scheme provides for the analysis of soil composition by the State Governments once in every two years so that remedial steps can be taken to improve soil nutrients. While the Soil Health Management Scheme has turned out to be a blessing for the farmers, it is also creating jobs for the agrarian youth.

GENERAL STUDIES - III

Topic – Issues related to food security

NATIONAL FOOD SECURITY MISSION (NFSM)

Context:

Under the NFSM, priority is being given to farmers on certified seeds in order to promote the latest high yielding varieties/hybrids of rice, wheat, pulses, coarse cereals, nutri-cereals, cotton, jute, sugarcane and oilseeds.

About the NFSM:

In view of the stagnating food grain production and an increasing consumption need of the growing population, Government of India has launched this **Centrally Sponsored Scheme, 'National Food Security Mission' in October 2007.**

The aim of NFSM is to increase the production of rice, wheat and pulses through:

1. Area expansion and productivity enhancement,
2. Restoring soil fertility and productivity,

3. Creating employment opportunities and
4. Enhancing farm level economy.

Coarse cereals were also included in the Mission from 2014-15 under NFSM.

In 2020, the Government has also included **Oilseeds and Oil Palm** under the National Food Security Mission (NFSM) to increase production of oilseeds and domestic availability of edible oils.

The states under the mission

- Government of India is promoting pulses and oilseeds cultivation in rice fallow areas of six eastern states (**Assam, Bihar, Chhattisgarh, Jharkhand, Odisha and West Bengal**) since 2016-17.
- **From 2019-20, six more states** (Madhya Pradesh, Maharashtra, Tamil Nadu, Gujarat, Karnataka and Andhra Pradesh) have been included to bring additional area and production of pulses and oilseeds.

Mains Question:

During the COVID-19 Pandemic the importance of National Food Security Mission has been increased manifold. Discuss.

GENERAL STUDIES - II

Topic– Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes.

NATIONAL CRECHE SCHEME

The National Crèche Scheme is a **centrally sponsored scheme** being implemented by the **Ministry of Women and Child Development**.

- National Creche Scheme (**earlier named as Rajiv Gandhi National Creche Scheme**) is being implemented through States/UTs with effect from 1.1.2017.
- It aims to provide day care facilities to children (age group of 6 months to 6 years) of working mothers.

The salient features:

1. Daycare Facilities including Sleeping Facilities.
2. Early Stimulation for children below 3 years and pre-school Education for 3 to 6 years old children.
3. Supplementary Nutrition (to be locally sourced)
4. Growth Monitoring
5. Health Check-up and Immunization

To increase the participation of women in the economy, the major steps taken by the Government are:

1. **Mahila Shakti Kendra Scheme:** The scheme aims to facilitate inter-sectoral convergence of schemes and programs meant for empowerment of women both at the central and State/UT level.
2. **SwadharGreh Scheme:** The Scheme caters to women victims of unfortunate circumstances in need of institutional support for rehabilitation, so that they can lead their life with dignity.
3. **Ujjawala Scheme:** It is a comprehensive scheme for prevention of trafficking of women and children for commercial sexual exploitation, as well as for facilitating rescue, rehabilitation and re-integration of victims in to their families and society as needed.
4. **Working Women's Hostel Scheme:** This scheme promotes availability of safe and conveniently located accommodation for working women, with day care facility for their children, wherever possible, in urban, semi-urban, and even rural areas, where employment opportunities for women exist.
5. **Anganwadi Services:** The Scheme envisages setting up of Anganwadi centers across the country for children and caters to the pre-school education, nutrition of children and lactating mothers.
6. **POSHAN Abhiyan:** The scheme aims to reduce mal-nutrition/ under nutrition, among young children and women from the country in a phased manner.
7. **Pradhan Mantri Matru Vandana Yojana (PMMVY) Scheme:** The Scheme provides cash incentives amounting to Rs.5000 in 3 installments to pregnant and lactating mothers.
8. **BetiBachaoBetiPadhao (BBBP):** Objective of the scheme is to celebrate the girl child by preventing gender biased sex selective elimination, ensuring survival protection, education, and participation.
9. **Home for Widows:** A Home for Widows has been set up in Vrindavan, UP to provide widows a safe and secure place to stay and live their lives with dignity.

GENERAL STUDIES - II

Topic– Role of women and women's organizations, Population and associated issues, Poverty and developmental issues, Urbanization, their problems and their remedies.

PRADHAN MANTRI MAHILA SHAKTI KENDRA SCHEME

About the scheme:

Government of India approved implementation of **Mahila Shakti Kendra Scheme on 22nd November, 2017.**

The scheme is part of **Umbrella Scheme "Mission for Protection and Empowerment for Women"** of the Union Ministry of Women and Child Development

CHROME IAS ACADEMY

Key Highlights:

- The scheme envisages **community engagement through college student volunteers** in **aspirational districts**.
- It also aims to set up of **District Level Centres for Women (DLCWs)** and **State Resource Centres for Women (SRCWs)**.
- These will support the implementation of women centric schemes/programs and to function as Project Management Units for Beti Bachao Beti Padhao Scheme.

Implementation:

- The Scheme is **implemented through State Governments and UT Administrations**.
- The cost sharing ratio will be **60:40 between Centre and State** except for North East & Special Category States where the funding ratio is 90:10.
- For **Union Territories 100% central funding** is provided.

Challenges:

- The challenges faced while implementing the scheme include non-availability of college faculty members/colleges in certain Blocks in aspirational districts, and difficulties in engaging student volunteers.
- Task Forces are set up at national/state/district levels for monitoring/oversight and course correction.

CHROME FACTS FOR PRELIMS

CENTRAL SHEEP TRAINING INSTITUTE

Central Sheep Training Institute has been proposed to be set up in **Telangana**.

- The Telangana Government has initiated steps for skill development for various traditional practices adopted.
- Training programmes to the farmers on increasing of milk production, maintenance of livestock health, sheep rearing and so on are organized at field level.

PIB-FEBRUARY 15th, 2021

GENERAL STUDIES - III

Topic– *Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage.*

WORLD PULSES DAY

Context:

Union Minister for Agriculture and Farmers Welfare addresses an international event organized in Rome to celebrate World Pulses Day.

Highlights:

- India is the **biggest producer and consumer of pulses** in the world and it has almost **achieved self-sufficiency in pulses**.
- India accounts for **62% of world's total pulses production in 2019-20**.
- In the last five-six years, India has increased pulses production from **140 lakh tonnes to more than 240 lakh tonnes**.
- India has emerged as a **global exporter/supplier of food items** in the world.
- In compare to the same period of the previous year, from April to December -2020, India recorded an increase in export of agricultural commodities including pulses with a **26% increase in pulses production**.

World Pulses Day 2021: History and significance

World Pulses Day, February 10, is a designated global event to recognize and emphasize the importance of pulses and legumes as a global food.

The UN General Assembly after recognizing the value of pulses in 2013, adopted 2016 as the **International Year of Pulses (IYP)**.

- As the International Year of Pulses succeeded **Burkina Faso (a landlocked country in West Africa)** proposed the observance of World Pulses Day.
- **In 2019**, the General Assembly announced **February 10 as the World Pulses Day**.
- The World Pulses Day was celebrated as per the United Nations Charter of the year 2016.

World Pulses Day 2021 Theme: #LovePulses.

Benefits of pulses:

- Pulses are rich in nutritional and protein values and are an important part of a healthy diet.
- Pulses, and legumes (**lentils, peas, chickpeas, beans, soybeans, and peanuts**) play an equally important role in health maintenance and overall improvement.
- Pulses also contribute majorly to achieving the **goals of the 2030 Agenda of Sustainable Development**.
- Pulses play a critical role in **marking challenges of poverty, food chain security, degraded health, and climate change**.
- Pulses and legume crops **help in improving the feasibility of agricultural production systems**.
- Pulses contribute to **environmental benefits**. The **nitrogen-fixing properties of pulses** improve soil fertility, which increases the productivity and fertility of the farmland.
- Pulses are **important for a healthy diet**. Take this day as an opportunity to raise awareness and recognize the contribution of pulses to sustainable food systems and healthy food cycle.

GENERAL STUDIES - III

Topic– Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage.

PRADHAN MANTRI KRISHI SINCHAYEE YOJANA

Context

Budgetary allocation for implementing various programmes/schemes of the Government are made on the basis of available resources and priorities with the approval of Parliament. For Pradhan Mantri Fasal Bima Yojana (PMFBY) and Per Drop More Crop component of PMKSY, Rs 14000 crore, and Rs 3500.00 crore was allocated respectively for the year of 2019-2020.

About PMKSY

PMKSY is a **Centrally Sponsored Scheme (Core Scheme)** launched in 2015.

The overarching vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is:

- To ensure access to some means of protective irrigation to all agricultural farms in the country,
- To produce 'per drop more crop', thus bringing much desired rural prosperity.

PMKSY has been conceived amalgamating ongoing schemes viz.

- Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources,
- River Development & Ganga Rejuvenation (MoWR, RD&GR),
- Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and
- On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

Implementation

- The scheme will be implemented by **Ministries of Agriculture, Water Resources and Rural Development.**
- **Ministry of Rural Development is to mainly undertake** rain water conservation, construction of farm pond, water harvesting structures, small check dams and contour bunding etc.
- **MoWR, RD & GR, is to undertake** various measures for creation of assured irrigation source, construction of diversion canals, field channels, water diversion/lift irrigation, including development of water distribution systems.

Ministry of Agriculture will promote efficient water conveyance and precision water application devices like:

1. drips, sprinklers, pivots, rain-guns in the farm "(Jal Sinchan)",
2. construction of micro-irrigation structures to supplement source creation activities,

3. Extension activities for promotion of scientific moisture conservation and agronomic measures.

Objectives

The broad objectives of PMKSY include

- Achieve convergence of investments in irrigation at the field level (preparation of district level and, if required, sub district level water use plans).
- Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (**Har Khet ko pani**).
- Enhance the adoption of precision – irrigation and other water saving technologies (More crop per drop).
- Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.

Programme Components

PMKSY has the following programme components:

Accelerated Irrigation Benefit Programme (AIBP)

To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.

PMKSY (Har Khet ko Pani)

- Creation of new water sources through Minor Irrigation (both surface and ground water)
- Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction rain water harvesting structures (**Jal Sanchay**);
- Command area development, strengthening and creation of distribution network from source to the farm;
- Ground water development in the areas where it is abundant, so that sink is created to store runoff/ flood water during peak rainy season.

Creating and rejuvenating traditional water storage systems like

- Jal Mandir (Gujarat);
- Khatri, Kuhl (H.P.);
- Zabo (Nagaland);
- Eri, Ooranis (T.N.);
- Dongs (Assam);
- Katas, Bandhas (Odisha and M.P.) etc. at feasible locations.

PMKSY (Per Drop More Crop)

- Department of Agriculture Cooperation & Farmers' Welfare is implementing 'Per Drop More Crop' component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY- PDMC).

- **The PMKSY- PDMC focuses on** enhancing water use efficiency at farm level through Micro Irrigation technologies viz. Drip and Sprinkler irrigation systems.
- Drip micro irrigation technique not only helps in water saving but also in reducing fertilizer usage, labour expenses and other input costs.

Key features of 'Per Drop More Crop'

- **Construction of micro irrigation structures** to supplement source creation activities including tube wells and dug wells.
- **Secondary storage structures** at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources like streams for use during dry periods through effective on – farm water management;
- **Water lifting devices** like diesel/ electric/ solar pumpsets including water carriage pipes, underground piping system.
- **Extension activities** for promotion of scientific moisture conservation and agronomic measures including cropping alignment to maximise use of available water including rainfall and minimise irrigation requirement (**Jal sarankchan**);
- Capacity building, training and awareness campaign and management practices including community irrigation.

PMKSY (Watershed Development)

- Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line 5 treatment, rain water harvesting, in – situ moisture conservation and other allied activities on watershed basis.
- Converging with MGNREGS for creation of water source to full potential in identified backward rainfed blocks including renovation of traditional water bodies.

CHROME FACTS FOR PRELIMS

RASHTRIYA SANSKRITI MAHOTSAV-2021

11th edition of 'Rashtriya Sanskriti Mahotsav to be inaugurated at **Cooch Behar in West Bengal**.

Highlights:

- Rashtriya Sanskriti Mahotsav (RSM) is the **flagship festival of this Ministry of culture**.
- It is organized **since 2015** with the active participation of **Seven Zonal Culture Centres**.
- It has been instrumental in showcasing, **folk and tribal art, dance, music, cuisines & culture of one state in other states**.
- **Ten editions of RSM have been held** till date since November, 2015 in various states and cities such as Delhi, Varanasi, Bengaluru, Tawang, Gujarat, Karnataka, Tehri and Madhya Pradesh.

- The Rashtriya Sanskriti Mahotsav-2021 will cover a profusion of folk art forms and it would offer the chance to experience the best in established and emerging virtuosity.

World Radio Day

The World Radio Day is **observed on 13 February** annually.

- It was **proclaimed in 2011 by the Member States of UNESCO**, and **adopted by the United Nations General Assembly in 2012** as an International Day.
- **World Radio Day 2021 theme:** “New World, New Radio”.
- February 13, marks the **establishment of United Nations radio in 1946**.
- Radio is a **powerful medium for celebrating humanity** in all its diversity and constitutes a platform for democratic discourse.

International Day of Women and Girls in Science

- The International Day of Women and Girls in Science, is celebrated on **11 February**
- It is adopted by a resolution of the **United Nations General Assembly on 22 December, 2015**.
- The day **recognizes the critical role women and girls play in science and technology**.
- This Day is an opportunity to promote full and equal access to and participation in science for women and girls.

2021 Theme: Women Scientists at the forefront of the fight against COVID-19.

Women Excellence Award 2021

- **Science and Engineering Research Board (SERB)** announces Women Excellence Award 2021 on the International Day of Women and Girls in Science.
- The SERB, is a **statutory body of the Department of Science and Technology (DST)**.
- it supports basic research in the frontier areas of science and engineering, was launched in the year 2013.
- It is a **one-time award given to women scientists below 40 years of age** who have received recognition from any one or more of the National Academies such as Young Scientist Medal, Young Associateship, etc.

CSI SIG E-Governance Awards 2020

The **Ministry of Tribal Affairs** bags Award of Appreciation in the **18th CSI SIG E-Governance Awards 2020**.

Highlights:

- The **Computer Society of India (CSI)** has instituted a series of awards for recognizing the contributions made in the field of e-Governance in the country.
- These awards have been conducted by CSI-SIG eGov.
- The awards are given for recognizing the efforts made in the e-Governance area at the State, Department, District and Project levels.

GENERAL STUDIES - III

Topic– transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

GRAPENET SYSTEM OF APEDA

Context:

In a bid to ensure cyber security protection for its traceability initiative, APEDA has adopted **next generation Blockchain and Cloud migration enabled GrapeNet System**. It would ensure a secured, scalable and cost effective interface for all the stakeholders in the exports value chain.

What is the GrapeNet?

The GrapeNet is a **web based certification and traceability software system** for monitoring fresh grapes exported from India to the European Union.

- APEDA can trace details of the consignment right upto the farm plot level.
- After integration Blockchain, GrapeNet will be more secure.
- On the occasion of **APEDA foundation day on 13th February, 2021** the integration into Blockchain and Cloud migration has been announced.

How will Blockchain help in GrapeNet?

The Blockchain will help track all the activities and steps **involved in the grapes lifecycle process**, right from the allocation of the farms for production of the grapes to the point of grapes being delivered to the customers.

- It will **keep a record of all the processes involved** which can be traced by the customers at the end of the chain to validate the authenticity of the grapes being provided to them.
- The **traceability of the grapes can be done from any level**.

What is the Blockchain?

Blockchain is a **shared, immutable ledger** that facilitates the **process of recording transactions and tracking assets in a business network**.

- **The technology is ideal for delivering that information** because it provides immediate, shared, and completely transparent information stored on an immutable ledger **that can be accessed only by network members**.
- **A Blockchain network can track** test reports, consignments, production, and much more.
- Since because **members share a single view of the truth**, they can see all details of a transaction end-to-end, giving those greater confidence, as well as new efficiencies and opportunities.

About APEDA:

The **Agricultural and Processed Food Products Export Development Authority (APEDA)** was established by the Government of India under the **Agricultural and Processed Food Products Export Development Authority Act** passed by the Parliament in December, 1985. The came into effect from 13th February, 1986.

- The **Authority replaced the Processed Food Export Promotion Council (PFEPC)**.
- It functions under **the Ministry of Commerce and Industry**.
- The Authority has its **headquarters in New Delhi**.

GENERAL STUDIES - III

Topic– *Achievements of Indians in Science & Technology; indigenization of technology and developing new technology.*

INDIA MAPS THE 21st CENTURY

Context:

The Department of Science and Technology is announcing sweeping changes to India's mapping policy, specifically for Indian companies.

Highlights:

To realise **India's vision of Atmanirbhar Bharat and the goal of a 5 trillion-dollar economy**, the regulations that apply to geospatial data and maps henceforth stand radically liberalised.

- What is **readily available globally does not need to be restricted in India** and therefore geospatial data that used to be restricted will now be freely available in India.
- The Indian corporations and innovators are no longer subject to restrictions nor do they require prior approvals before they collect, generate, prepare, disseminate, store, publish, update digital Geospatial Data and Maps within the territory of India.

Background:

Maps and accurate geospatial data are crucial for national infrastructure projects such as linkages of rivers, creation of industrial corridors and deploying smart power systems.

- **Emerging vibrant technologies** like Digital India, Smart Cities, eCommerce, autonomous drones, delivery, logistics and urban transport require a leap forward in mapping with greater depth, resolution and precision.
- **In every economic endeavor**, spanning agriculture, finance, construction, mining and local enterprise, India's farmers, small businesses and corporations alike stand to gain tremendously from the application of innovative technologies based on modern geospatial data technologies and mapping services.

Need for mapping:

The Prime Minister observed however, that the existing regime imposed significant restrictions on the mapping industry – from creation to dissemination of maps, **requiring**

Indian companies to seek licenses, follow a cumbersome system of pre-approvals and permissions.

Compliance with these regulatory restrictions has subjected startups in India to **unnecessary red tape, hindering Indian innovation in map technologies** for decades.

Significance:

With the next generation of mapping technology just about coming into its own around the world, this policy will enable Indian innovators to create substantial advances in mapping ultimately making our lives easier and empowering small businesses.

We look forward to India emerging as a mapping power, creating next generation indigenous maps of India and taking these new technologies to the rest of the world.

GENERAL STUDIES-III

Topic– *Infrastructure: Energy, Ports, Roads, Airports, Railways etc.*

NATIONAL URBAN TRANSPORT POLICY (NUTP)

Context:

Recently, the 13th Urban Mobility India (UMI) Conference was organized by the Ministry of Housing and Urban Affairs.

Urban Mobility India (UMI) is a part of government's National Urban Transport Policy, 2006 (NUTP).

About NUTP:

The National Urban Transport Policy, 2006 (NUTP) was issued by The **Ministry of Housing and Urban Affairs, Government of India.**

The objective of the policy is to ensure safe, affordable, quick, comfortable, reliable and sustainable access for the growing number of city residents to jobs, education, recreation and such other needs within our cities.

Why it was needed?

Urbanization in India is a reality of the 21st century, which has culminated in the development of India as one of the fastest growing major economy in the world.

- The transport sector is an important component of the urban economy.
- However, with rapidly increasing mobility, needs and availability of technology, there is **expected shift from vehicle ownership to vehicle sharing and public transport**, with higher emphasis on multimodal seamless connectivity and clean mobility.
- These **emerging trends are likely to bring a paradigm shift** in the expectations of the commuters and our cities need to adapt to the rapidly changing mobility needs.

The Initiatives taken by Government to address Urban Transport issues:

- **Jawaharlal Nehru National Urban Renewal Mission JNNURM, 2005:** JNNURM was launched in 2005 and closed in 2014 (now succeeded by Atal AMRUT Mission).
- **National Urban Transport Policy (NUTP), 2006:** The policy envisages safe, affordable, quick, comfortable, reliable and sustainable urban transport through establishment of quality focused multi-modal public transport systems.
- **Green Urban Transport Scheme, 2016:** To improve **non-motorised transport infrastructure** such as dedicated lanes for cycling, pedestrians, increasing access to public transport, use of clean technologies and adoption of **intelligent transport systems (ITS)**.
- **Mass Rapid Transit/ Transport Systems (MRTS):** The metro rail has come up as a favoured alternative of mass transport in Indian cities.
- **Bus Rapid Transport System (BRTS):** To segregates the movement of buses from all other transport modes, and to introduce other safety related changes in the road infrastructure.
- **Promotion of Electric Vehicles:** Indian Government plans to have an all-electric fleet of vehicles by 2030.

Mains Question:

National urban transport policy highlights on moving people instead of moving vehicles. Critically discuss the success of Government's various policies on the urban transport.

GENERAL STUDIES - II

Topic– Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

MULTI-LOCATION CLAIM FACILITY OF EPFO

Context

Recently, a multi-location claim settlement facility was **launched by EPFO**.

Highlights:

- The multi-location claim settlement facility will bring a **paradigm shift by allowing EPFO offices to settle online claims from any of its regional offices, across the country.**
- All types of online claims i.e. provident fund, pension, partial withdrawal and claims and transfer claims can be processed under this novel initiative.
- **The first batch of multi-location claims** under this path-breaking project was settled for **Gurugram Region** on 10th June 2020.

Need for:

EPFO has **moved away from the existing system of geographical jurisdiction for claim processing** by rolling out multi-location claim settlement facility.

CHROME IAS ACADEMY

- This will allow offices with lesser workload to share the burden of offices that have accumulated a higher level of pendency, due to COVID-19 restrictions.
- It enables fast-tracking of settlement process through most appropriate engagement of EPFO's workforce in all its regional offices across the country.

Significance

- The launch of multi-location claim settlement facility is a momentous step towards the larger objectives of ushering faceless claims processing.
- Thereby, it will bring greater levels of transparency, efficiency, reduction of member grievances and expeditious settlement of online claims in line with Prime Minister's vision of Digital India.

Employees' Provident Fund Organisation (EPFO)

- The EPFO is an organization tasked to assist the Central Board of Trustees.
- **Employees' Provident Fund is a statutory body.**
- It is formed by the **Employees' Provident Fund and Miscellaneous Provisions Act, 1952.**
- **It is under the administrative control of the Ministry of Labour and Employment, Government of India.**

PIB-FEBRUARY 17th, 2021

GENERAL STUDIES-I

Topic– Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.

MAHARAJA SUHELDEV

Context:

Uttar Pradesh is celebrating the **112th birth anniversary of Maharaja Suheldev.**

PM lays the foundation stone of Maharaja Suheldev Memorial and development work of Chittaura Lake on this occasion.

About Maharaja Suheldev:

- Maharaja Suheldev was the **erstwhile ruler of Shravasti in Uttar Pradesh's Bahraich district**, who ruled in the 11th century.
- He is known in the history for **waging a guerrilla warfare against Mahmud Ghazni's colossal army.**
- Raja Suheldev of Shravasti who **gathered heads of different communities likes Tharu and Banjara** as well as small kings to block the invasion.
- On June 15, 1033, the armies of King Suheldev and Syed Salar Masood fought a war on the banks of **Chittaura Lake in Bahraich.**

- In this battle, Suheldev's army completely destroyed Salar Masood's army.
- The Prime Minister had released a stamp commemorating Maharaja Suheldev two years ago.



GENERAL STUDIES-II

Topic– Important International institutions, agencies and fora- their structure, mandate.

26th UNITED NATIONS CLIMATE CHANGE CONFERENCE

Context:

The Rt Hon Alok Sharma MP, **President-designate of the 26th UN Climate Change Conference of the Parties (COP26)** called on Indian Prime Minister.

- COP refers to the decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC).
- The 26th session of **COP** will be hosted by the UK in November 2021 in Glasgow.

About COP26

The 2021 United Nations Climate Change Conference, also known as COP26, **is the 26th United Nations Climate Change conference.**

- COP 26 is scheduled to be **held in Glasgow, Scotland**, from 1 to 12 November 2021 **under the presidency of the United Kingdom.**
- The conference is set to incorporate the COP 26 of (UNFCCC), the 16th meeting of the parties to the Kyoto Protocol (CMP16), and the third meeting of the parties to the Paris Agreement (CMA3).

- Parties are required to carry out every five years, as outlined in the Paris Agreement, a process colloquially known as the '**ratchet mechanism**'.

What is the COP?

The Conference of the Parties (COP) is the supreme decision-making body of the Convention.

- All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts.
- The **COP meets every year**, unless the Parties decide otherwise.
- **The first COP meeting was held in Berlin**, Germany in March, 1995.

The COP Presidency rotates among the five recognized UN regions – that is, Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe and Western Europe and Other.

What is the Paris Agreement?

The Paris Agreement is a **legally binding international treaty on climate change**.

- It was adopted by **196 Parties at COP 21 in Paris, on 12 December 2015** and entered into force on 4 November 2016.
- The Paris Agreement is a **landmark in the multilateral climate change process** because, for the first time, a **binding agreement brings all nations into a common cause** to undertake ambitious efforts to combat climate change and adapt to its effects.

Objective:

- Its goal is **to limit global warming to well below 2, preferably to 1.5 degrees Celsius**, compared to pre-industrial levels.
- To achieve this **long-term temperature goal**, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century.

How does the Paris Agreement work?

Implementation of the Paris Agreement requires **economic and social transformation**, based on the best available science.

- The Paris Agreement **works on a 5- year cycle of increasingly ambitious climate action** carried out by countries.
- By 2020, countries submit their plans for climate action known as **nationally determined contributions (NDCs)**.

What are the NDCs?

- In their NDCs, **countries communicate actions they will take to reduce their Greenhouse Gas emissions** in order to reach the goals of the Paris Agreement.
- Countries also communicate in the NDCs actions they will take to build resilience to adapt to the impacts of rising temperatures.

What have we achieved so far?

Although climate change action needs to be massively increased to achieve the goals of the Paris Agreement, the years since its entry into force have already sparked **low-carbon solutions** and new markets.

- More and more countries, regions, cities and companies are establishing **carbon neutrality targets**.
- **Zero-carbon solutions** are becoming competitive across economic sectors representing 25% of emissions.
- This trend is most noticeable in the power and transport sectors and has created many new business opportunities for early movers.
- **By 2030, zero-carbon solutions** could be competitive in sectors representing over 70% of global emissions.

GENERAL STUDIES-II

Topic– *Achievements of Indians in Science & Technology; indigenization of technology and developing new technology.*

TECHNOGRAHIS

Context:

An Enrolment Module for TECHNOGRAHIS, has been launched by the MoHU.

Who are TECHNOGRAHIS?

- TECHNOGRAHIS are students from IITs, NITs, engineering, planning and architecture colleges, faculty members, academicians, and stakeholders.
- The interested candidates can register themselves **to visit these Live Laboratories at six LHP sites** for learning, consultation, generation of ideas and solutions, experimentation, innovation, and technical awareness.

Background:

The **Ministry of Housing and Urban Affairs (MoHUA)** is promoting six **Light House Projects (LHPs)** as Live Laboratories for transfer of technology to the field.

- **The primary goal** is to encourage large scale participation of people to create technical awareness for on-site learning.
- The LHPs are being constructed at Indore (Madhya Pradesh), Rajkot (Gujarat), Chennai (Tamil Nadu), Ranchi (Jharkhand), Agartala (Tripura) and Lucknow (Uttar Pradesh).

About Light House Projects (LHPs):

The LHPs are **model housing projects**. About 1,000 houses at each location are being built with allied infrastructure facilities.

- LHPs are being built as part of the **Global Housing Technology Challenge-India (GHTC-India) initiative** under the Pradhan Mantri Awas Yojana-Urban (PMAY-U).

CHROME IAS ACADEMY

- **This technology revolution** is cost-effective, environment-friendly, disaster-resilient and promotes speedier construction.
- The initiative will prove to be a major push towards technical transformation in India.

ASHA-India

Affordable Sustainable Housing Accelerators – India (ASHA-India) aims to promote domestic research and entrepreneurship by providing incubation and acceleration support to potential future technologies.

- **Under ASHA-India initiative**, five ASHA-India Centers have been set up for providing incubation and acceleration support.
- The ASHA-India Centers will also help in developing design guidelines, construction manuals and other necessary guidelines, relevant for effective use of such technologies in the region.

PMAY-U Mission

Pradhan Mantri Awas Yojana – Urban (PMAY-U) Mission has been designed to achieve the vision of “Housing For All by 2022”.

It is a flagship Mission of Government of India being implemented **by Ministry of Housing and Urban Affairs (MoHUA)**, was launched on **25th June 2015**.

CHROME FACTS FOR PRELIMS

MAHABAHU-BRAHMAPUTRA

PM to launch ‘Mahabahu-Brahmaputra’ and lay foundation stone of two bridges in Assam. The launch of Mahabahu-Brahmaputra will be marked by the inauguration of the **Ro-Pax vessel operations** between Neamati-Majuli Island, North Guwahati-South Guwahati and Dhubri-Hatsingimari.

- **‘Mahabahu-Brahmaputra’ is aimed** at providing seamless connectivity to the eastern parts of India and includes various development activities for the people living around Brahmaputra and Barak rivers.
- **The Ro-Pax services** will help in reducing the travel time by providing connectivity between banks and thus reducing the distance to be travelled by road.

Dhubri Phulbari Bridge

Prime Minister will lay the foundation stone for the **four lane bridge over the Brahmaputra between Dhubri (on North Bank) and Phulbari (on South Bank)**.

- The proposed Bridge will be **located on NH-127B**, originating from Srirampur on NH-27 (East-West Corridor), and terminating at Nongstoin on NH-106 in the State of Meghalaya.
- It will connect **Dhubri in Assam to Phulbari, Tura, Rongram and Rongjeng in Meghalaya**.

Majuli Bridge

It will be a **two-lane Bridge on the Brahmaputra** between Majuli (North Bank) and Jorhat (South Bank).

- The bridge will be **located on NH-715K** and will connect Neematighat (on Jorhat side) and Kamalabari (on Majuli side).
- The Construction of the bridge has been a long demand of the people of Majuli who for generations have been dependent on the ferry services to connect with the mainland of Assam.

PIB-FEBRUARY 18th, 2021

GENERAL STUDIES- II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

JUVENILE JUSTICE (CARE AND PROTECTION OF CHILDREN) ACT, 2015

Context:

Recently, The Union Cabinet has approved the proposal of the Ministry of Women and Child Development to amend the Juvenile Justice (Care and Protection of Children) Act, 2015

It aims to introduce measures for strengthening Child Protection set-up to ensure best interest of children.

What are the changes?

- District Magistrate and Additional District Magistrate are **authorised to issue adoption orders under Section 61** of the Juvenile Justice (Care and Protection of Children) Act (JJ Act).
- It was done **to ensure speedy disposal of cases and enhance accountability.**
- The District Magistrates have been further **empowered under the Act**, to ensure its smooth implementation, as well as garner synergized efforts in favour of children in distress conditions.
- **eligibility parameters for appointment of CWC members are defined** and previously **undefined offences are categorised** as 'serious offence' are some of the other aspects of the proposal.
- Several difficulties faced in implementation of various provisions of the Act have also been addressed.

What is the JJ Act?

The Juvenile Justice Act, 2015 is the major legal text on Child Protection in India.

- The JJ Act guarantees the security, the protection, the education and the well-being of the children in need in India.
- The Act recommends enquiries to determine if the situation of vulnerability of a child requires a placement in a children's home.

How does juvenile justice work in India?

- The Juvenile Justice (Care and Protection of Children) Act, 2015, **defines the legal framework in which juveniles (below 18 years old in India) can appear before a judge.**
- Juveniles in conflict with the law must be distinguished from children in need of care and protection.
- If the situation requires it, the latter can be placed by a judge in a children home to protect them. TARA children are thus all "children in need of care and protection", as per the definition given by the Juvenile Justice Act.

The juvenile justice act – principles in practice:

- Children meet with their families every month and exchange a weekly phone call when possible.
- Children deposit complaints and suggestions in a dedicated box which are reviewed weekly during the staff meeting in presence of the Child Representative.
- Children are supervised round the clock by competent, reliable and trained adults.
- Children are supervised at night by dedicated night staff who complete half hourly checks during this most vulnerable time.
- Girl children are always surrounded by at least one female staff.

GENERAL STUDIES - II

Topic– India and its neighborhood- relations.

COMPREHENSIVE ECONOMIC COOPERATION AND PARTNERSHIP AGREEMENT (CECPA)

Context:

Cabinet approves Comprehensive Economic cooperation and Partnership Agreement between India and Mauritius.

The salient features of India-Mauritius CECPA:

- The India-Mauritius CECPA will be the **first trade Agreement to be signed by India with a country in Africa.**

- The Agreement is a **limited agreement**, which will cover certain areas including Trade in Goods, Rules of Origin, Trade in Services, Telecom, Financial services, and Customs Procedures and Cooperation in other Areas.

Impact or benefits:

CECPA provides for an institutional mechanism to encourage and improve trade between the two countries.

- The CECPA between India and Mauritius **covers 310 export items for India** including food stuff and beverages, agricultural products, and other areas.
- **Mauritius will benefit from preferential market access into India for its 615 products**, including frozen fish, speciality sugar, apparel and several other areas.
- As regards trade in services, **Indian service providers will have access to around 115 sub-sectors** from the 11 broad service sectors.
- Both sides have also agreed to negotiate an **Automatic Trigger Safeguard Mechanism (ATSM)** for a limited number of highly sensitive products within two years of the Signing of the Agreement.

Background:

India and Mauritius enjoy excellent bilateral relations, sustained by historic cultural affinities, frequent high-level political interactions, development cooperation, defence and maritime partnership, and people to people linkages.

- Mauritius is an important development partner of India.
- India had extended a 'Special Economic Package' of USD 353 million to Mauritius in 2016.
- The **new Supreme Court building project** is one of the five projects being implemented under this package.
- In October 2019, the Phase -I of the Metro Express Project and the 100-bed state of the art ENT hospital project was also built under the special economic package.
- Since 2005, India has been among the largest trading partners of Mauritius, and has been one of the largest exporters of goods and services to Mauritius.

Trade relations:

According to the **International Trade Centre (ITC)**, in 2019, the main import partners of Mauritius were India (13.85%), China (16.69%), South Africa (8.07%), and UAE (7.28%).

- The bilateral trade between India and Mauritius **has registered a growth of 233%** from USD 206.76 million in Financial Year (FY) 2005-06 to USD 690.02 million in FY 2019-20.
- **India's exports to Mauritius surged 232%** from USD 199.43 million in FY 2005-06 to USD 662.13 million in FY 2019-20.
- While, **India's imports from Mauritius increased 280%** from USD 7.33 million in 2005-06 to USD 27.89 million in FY 2019-20.

- The India-Mauritius CECPA will further cement the already deep and special relations between the two countries.

GENERAL STUDIES- III

Topic– Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

PLI SCHEME FOR TELECOM SECTOR

Context:

The cabinet has approved the **Production Linked Incentive (PLI) Scheme** for Telecom and Networking Products.

- This decision has been taken in pursuant to the extraordinary incentive of PLI being provided by Government of India in various sectors.
- The Cabinet decision addresses another component of **Atmanirbhar Bharat** to make India a global hub of manufacturing telecom equipment.

What is PLI scheme?

Production Linked Incentive Schemes (PLI Scheme) are an outcome- and output-oriented scheme where incentives will be paid only if the manufacturers make the goods.

- These schemes provide the **cash incentives for five to seven years** and all the sunrise and important sectors are proposed to be covered in this.
- **The sectors includes** automobile, networking products, food processing, advanced chemistry and solar PV manufacturing.

Key features of the scheme:

- The scheme shall extend an **incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India** to eligible companies, for a **period of five (5) years** with financial year (FY) 2019-20 considered as the base year for calculation of incentives.
- The Scheme will be **implemented through a Nodal Agency which shall act as a Project Management Agency (PMA).**

Eligibility:

- All electronic manufacturing companies **which are either Indian or have a registered unit in India** will be eligible to apply for the scheme.
- These companies can **either create a new unit or seek incentives for their existing units** from one or more locations in India.

- Any additional **expenditure incurred by companies on plant, machinery, equipment,** research and development and transfer of technology for manufacture of mobile phones and related electronic items will be eligible for the incentive scheme.
- However, **all investment done by companies on land and buildings for the project will not be considered** for any incentives or determine eligibility of the scheme.

Significance:

The scheme, will on one hand attract big foreign investment in the sector, while also encouraging domestic mobile phone makers to expand their units and presence in India.

GENERAL STUDIES- II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

PEY JAL SURVEKSHAN

Context:

Recently, the Ministry of Housing & Urban Affairs has launched a Pey Jal Survekshan 10 cities under Jal Jeevan Mission (Urban).

Highlights:

- As part of the survey, data will also be collected on **wastewater management and condition of water bodies in the cities.**
- Initially, the survey is being launched as a pilot in **ten cities namely**, Agra, Badlapur, Bhubaneswar, Churu, Kochi, Madurai, Patiala, Rohtak, Surat and Tumkur.
- based on the learnings of the pilot, this survekshan will be extended to all the AMRUT cities.
- The mission will further work towards minimising water distribution losses to reduce non revenue water from current 40-50% to nearly 20%.

Jal Jeevan Mission (Urban):

JJM (U) is designed to provide **universal coverage of water supply to all households** through functional taps in all 4,378 statutory towns in accordance with SDG Goal- 6.

- **Sewerage/septage management in 500 AMRUT cities** with the objective of making them water secure are the major focus areas under JJM(U).
- The scheme will be **implemented first through signing of MoUs between the Centre, states, and the urban local bodies.**

- **Estimated gap in urban household tap connections** is 2.68 crore and estimated gap in sewer connections/septage in 500 AMRUT cities is 2.64 crore, which is proposed to be covered in JJM(U).
- The total outlay proposed for JJM(U) is ₹2,87,000 crore which includes ₹10,000 crore for continuing financial support to AMRUT Mission.

PIB-FEBRUARY 19th, 2021

GENERAL STUDIES - III

Topic– *Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes.*

NURTURING NEIGHBOURHOODS CHALLENGE COHORT

Context:

The Smart Cities Mission, Ministry of Housing and Urban Affairs, announced **twenty-five shortlisted cities** for the 'Nurturing Neighbourhoods Challenge' cohort.

The Challenge is being implemented in collaboration with the **Bernard van Leer Foundation (BvLF)** and technical partner **WRI India**.

About the Challenge:

The Nurturing Neighbourhoods Challenge, **launched on November 4th, 2020**, by MoHUA.

- It invited **participation from all Smart Cities, capitals of States and UTs, and other cities with population above 5 lakhs** were eligible to participate.
- The Challenge is a **3-year initiative** aimed at supporting early childhood-friendly neighbourhoods under the government's Smart Cities Mission.

Objective:

Under its **prime objective of inclusive development**, the Government of India is committed to **enhancing opportunities in urban areas** for all vulnerable citizens, especially young children.

Significance and benefits:

- Over the 3-year initiative, selected cities based on their proposal, readiness, and commitment – **will receive technical support** and capacity-building to develop, pilot and scale solutions that enhance the quality of life of young children.
- Over time, the **programme will enable city leaders, managers, staff, engineers, urban planners, and architects** to incorporate a focus on early childhood development into the planning and management of Indian cities.

GENERAL STUDIES - III

Topic– *Achievements of Indians in science & technology; indigenization of technology and developing new technology.*

INDIA'S EOS-01 MISSION

Context

India's latest earth observation satellite, EOS-01, was launched on November 7, 2020.

- India's Polar Satellite Launch Vehicle, in its **fifty first flight (PSLV-C49)**, successfully launched **EOS-01 along with nine international customer satellites** from Satish Dhawan Space Centre (SDSC) SHAR,
- **The nine customer satellites** from Lithuania (1), Luxembourg (4) and USA (4) were launched under a commercial arrangement with **New Space India Limited (NSIL)**.

About EOS-01

- **EOS-01 is an earth observation satellite**, intended for applications in **agriculture, forestry and disaster management support**.
- EOS-01 is another **Radar Imaging Satellite (RISAT)** that will work together with RISAT-2B and RISAT-2BR1 launched last year.
- **EOS-01 was initially named RISAT-2BR2**, and was supposed to be the third of the **three-spacecraft constellation** aimed at providing **all-weather round-the-clock service** for high-resolution images.
- Henceforth, it seems, **all the earth observation satellites would be called EOS-series**.

What it will do?

Land and forest mapping and monitoring, mapping of resources like water or minerals or fishes, weather and climate observations, soil assessment, geospatial contour mapping are all done through earth-observation satellites.

What is the 'Radar imaging'?

Depending on the **wavelength of the electromagnetic radiation used by the radar**, different properties on land can be captured in the image.

- Radar can **distinguish one kind of target from another** (such as a bird from an aircraft), and some systems are able **to recognize specific classes of targets** (for example, a commercial airliner as opposed to a military jet fighter).
- One big advantage that radar imaging has over optical instruments is that **it is unaffected by weather, cloud or fog, or the lack of sunlight. It can produce high-quality images in all conditions and at all times**.
- **According to ISRO**, EOS-01 is intended for applications in agriculture, forestry and disaster management support.
- The radar images are also considered to be **immensely useful for military requirements**.

Mains Question:

What is the Radar Imaging? Discuss the uses and significance of EOS-series.

GENERAL STUDIES - III

Topic– Major Crops – cropping patterns in various parts of the country.

NATIONAL SAFFRON MISSION (NSM)

Context:

NECTAR undertakes a pilot project to explore feasibility of growing saffron in North East region.

Highlights

- Jammu and Kashmir is called the **Saffron bowl of India**.
- The saffron bowl, **which was so far confined to Kashmir**, may soon expand to the North East of India.
- Plants from **seeds transported from Kashmir to Sikkim and acclimatized** there are now flowering in **Yangyang in the Southern part of the North-East state**.
- **Similarity of climatic and geographical conditions** between Pampore (Kashmir) and Yangyang (Sikkim) leads to successful sample farming of Saffron in Yangyang

About the National Saffron Mission (NSM):

National Saffron Mission (NSM) **launched by the Centre in 2010**, to boost saffron cultivation **has failed to yield the desired results**.

The five-year project was extended by another two years in October 2015.

- The project's report card is dismal if one goes by the complaints of the saffron cultivators. However, officials connected with the Mission claim it is a success.
- The NSM was enhanced to Rs 400 crore in 2015.

Saffron production in India

Saffron production has long been restricted to a **limited geographical area in the Union territory of Jammu & Kashmir**.

- **Pampore region, in India, commonly known as Saffron bowl of Kashmir**, is the main contributor to saffron production, followed by Budgam, Srinagar, and Kishtiwari districts.
- Saffron has traditionally been associated with the **famous Kashmiri cuisine**.
- It's its **medicinal values** were considered as part of the **rich cultural heritage of Kashmir**.
- As saffron growing was confined to very specific areas in Kashmir, its production remained limited.
- Though the **National Mission on Saffron** focused on several measures to improve its farming, the measures were still limited to the specified areas of Kashmir.

North East Centre for Technology Application and Reach (NECTAR)

- NECTAR is an autonomous body under the Department of Science & Technology, Government of India.
- It is supporting a pilot project to explore the feasibility of growing saffron in North East region of India, with the same quality and higher quantity.

Mains Question:

The saffron bowl, which was so far confined to Kashmir, is now expanding to the North East of India. Discuss.

Fundamentals:

What is the BIO- Fortification?

Biofortification is the process by which the nutritional quality of food crops is improved through agronomic practices, conventional plant breeding, or modern biotechnology.

- **Biofortification aims to** increase nutrient levels in crops during plant growth rather than through manual means during processing of the crops.
- Biofortification may therefore present a way to reach populations where supplementation and conventional fortification activities may be difficult to implement and/or limited.

What is the Fortification of a crop?

Fortification is the practice of **deliberately increasing the content of an essential micronutrient**, i.e. vitamins and minerals (including trace elements) in a food.

- So as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.

Examples of biofortification projects include:

- iron-biofortification of rice, beans, sweet potato, cassava and legumes;
- zinc-biofortification of wheat, rice, beans, sweet potato and maize;
- provitamin A carotenoid-biofortification of sweet potato, maize and cassava; and
- amino acid and protein-biofortification of sorghum and cassava.

How are crops fortified?

Biofortified crops can be developed by traditional breeding methods, **provided there is sufficient genetic variation in crop populations for the desired trait (such as high protein content).**

- In staple grains such as rice, **improvement of some complex traits such as vitamin A is not possible using conventional breeding strategies**, as there are no natural rice varieties rich in this vitamin.
- All plants produce pro-vitamin A, but only in the green organs of the plant and not in the starch-storing part of the seed.

- Conventional breeding is also **very difficult in vegetatively propagated varieties** (such as cassava and potatoes), due to the scarcity of genetically well-defined breeding lines.
- In addition, **conventional breeding can change important traits of the crops desired by consumers, such as taste.**
- **Agricultural biotechnology methods, and in specific genetic engineering (GM), represent therefore a very valuable, complementary strategy for the development of more nutritious crops.**
- Agronomic biofortification entails application of minerals such as zinc or iron as foliar or soil applications, drawing on plant management, soil factors, and plant characteristics to get enhanced content of key micronutrients into the edible portion of the plant.

Benefits and Concern of Biofortification of Crops

- Biofortification capitalizes on the consistent daily intake of food staples, thus indirectly targeting low-income households who cannot afford a more diverse diet.
- **After the initial investment of developing fortified crops, no extra costs are met, making this strategy very sustainable.**
- Furthermore, the improved varieties can be shared internationally.
- **Biofortified seeds are also likely to have an indirect impact in agriculture, as a higher trace mineral content in seeds confers better protection against pests, diseases, and environmental stresses, thereby increasing yield.**
- Biofortification is not a panacea in itself but a very important complement to dietary variety and to supplementation.

Mains Question:

What do you understand by fortification of foods? Discuss its advantages and associated concerns.

CHROME FACTS FOR PRELIMS

SINGAPORE INDIA CEOS FORUM (SICF)

The SICF's meeting was organized by the **Department for Promotion of Industry and Internal Trade (DPIIT) and FICCI** on February 18, 2021.

Highlights:

Indian minister of Commerce & Industry, said in forum:

- Singapore-India ties resting on greater degree of people to people engagement and that can rest on **three B's: – Buddhism, Bollywood and Business.**
- He also emphasized on **3 D's namely, Development, Diversification and Digital Economy.** These 3 D's would help in building a partnership which in turn will benefit both the countries.

About SICF:

Singapore India CEOs Forum (SICF) was formed by **Singapore Business Federation (SBF)** and **India's premier business chamber, FICCI**.

- **It aims** to broaden strategic cooperation between the two organisations.
- The inaugural Singapore India CEOs Forum (SICF) was hosted by SBF on 14 November 2018.

Software Defined Radio (SDR)

To arm the soldiers with advantages offered by technology and equip him to fight a war in the Net-Centric battle space, present radios are to be replaced soon by **indigenously developed Software Defined Radio (SDR)**.

- **The Combat Net Radio (CNR)** is the mainstay of communications for the Indian Army in the battlefield.
- The contemporary CNR equipment in the Indian Army **supports voice communication only** and has limited or no data transmission capability.

The **SDR will** have enhanced data transmission capability, enhanced voice clarity and data transmission accuracy in spectrally noisy environments, greater system security and better communication survivability in clear and secure mode to meet the operational requirements of the Indian Army.

Third India Tourism Mart

The third India Tourism Mart, **organized by the Federation of Associations in India Tourism and Hospitality (FAITH)**.

Significance: It is being organized at a time when the world is emerging from the dark clouds of the pandemic and countries all across the world are contemplating on opening up travel albeit with all health & security precautions in place

PIB-FEBRUARY 20th, 2021

GENERAL STUDIES - I

Topic– Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.

CHHATRAPATI SHIVAJI MAHARAJ

Context:

Shivaji Jayanti is celebrated on 19 February, every year, **in honour of the founder of the Maratha Kingdom**.

This year marks the **391 birth anniversary** of the great Maratha ruler.

Shivaji Jayanti: History

- Shivaji Jayanti or Chhatrapati Shivaji Maharaj Jayanti was **started by Mahatma Jyotirao Phule in 1870.**
- **Mahatma Jyotirao Phule discovered the tomb of Shivaji Maharaj on Raigad,** near Pune.
- Shivaji Jayanti was **taken forward by an esteemed freedom fighter Bal Gangadhar Tilak,**
- **Tilak** brought the contributions of Shivaji Maharaj into the light and influenced people by highlighting the image of Shivaji Maharaj.

Key facts about Chhatrapati Shivaji Maharaj:

- Shivaji, was born on February 19, 1630, at Shivner, Poona, India.
- He was founder of the Maratha kingdom of India.
- Shivaji Maharaj was named after the local Goddess Shivai, who blessed his mother by fulfilling her prayers for a son.
- Shivaji, during his life, engaged in both hostilities and alliances with the **Sultanates of Golkonda and Bijapur, the Mughal Empire and European colonial powers.**
- **India's first-ever navy in the modern era** was built by Shivaji to protect the coast of Maharashtra.
- The Maratha Navy guarded the Jaigad, Sindhudurg, Vijaydurg and other forts along the coast of Maharashtra.
- Shivaji, was a **secular king** as he also believed in peaceful co-existence of different religions.
- He never raided any religious place during his rule.
- Shivaji also actively encouraged Marathi language usage.
- Unlike many other rulers that India has seen, the **Maratha warrior king never allowed anyone to dishonour women.**
- Perpetrators of crimes against women, during his rule, were punished strictly. Also, women of captured territories were not harmed.
- With his intelligence, he **devised guerilla tactics of warfare.**
- Aurangzeb and his generals called Shivaji a "Mountain Rat" because of his tactics.

GENERAL STUDIES - II

Topic– *Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.*

ELEVENTH INDIA-EU MACROECONOMIC DIALOGUE

Context:

The 11th India-EU Macroeconomic dialogue was held recently.

Highlights:

- India-EU relationship has evolved into a multifaceted partnership.

- The dialogue covers all dimensions—**political, economic, security, trade and investment, environment, research and innovation.**
- The **EU is one of our largest trading partners, one of the largest investors in India** and an important source for technology, innovation and best practices.
- The dialogue, also covered sharing of their experiences to enable both sides on various aspects including **collaboration in the G20 on finance track matters**, including through G20 Framework Working Group deliverables, G20 Action plan, debt related issues and international taxation of digital economy.

India- European Union (EU) trade relationship:

- The EU is one of the largest investors in India with cumulative investment of over \$91 billion.
- The E.U. is India's largest trading partner and investor, and **accounts for 11% of India's global trade.**
- Trade with **India formed under 3% of the E.U.'s global trade.**
- At the **7th India-EU Summit held in Helsinki on 13th October 2006** political leaders move towards negotiations for a **broad-based trade and investment agreement** on the basis of the report of India-EU High Level Technical Group.
- In June 2007, India and the EU began negotiations on a broad-based **Bilateral Trade and Investment Agreement (BTIA)** in Brussels, Belgium.

Challenges:

- The European Union is seeking an ambitious and comprehensive bilateral trade and investment agreement (BTIA) with India and **not in favour of an early harvest pact covering fewer areas.**
- **India had in recent times exhibited a protectionist streak** – raising tariffs, speaking of self-reliance and reducing procurement opportunities for European firms.

Background:

- Talks for the trade pact began in 2007 but was called off after many rounds in 2013.
- Though some technical level talks were held to break the logjam in 2017, there has been no progress to report.
- The EU is India's largest trading partner despite "Brexit" or Britain's departure from the grouping and the source of 90 billion euros in investment since 2000.
- In many ways India had moved backwards on several issues since the last round of talks in 2013 and some technical discussions in 2017.

GENERAL STUDIES - III

Topic— *Science and Technology- developments and their applications and effects in everyday life.*

SATAT SCHEME

Context

A Waste to Energy plant at Okhla, Delhi, is being constructed by Indian Oil, NTPC Ltd and South Delhi Municipal Corporation (SDMC).

Highlights

The management of Municipal Solid Waste (MSW) is a major issue in Delhi, and this Energy plant will open the path towards the solution.

- The Indian Oil, SDMC and NTPC are coming together for this landmark project that has the potential to carve out a greener and more energy efficient future for the Atmanirbhar Bharat.
- This is an existing model of providing offtake guarantee, under the SATAT scheme for compressed biogas production plants.

About the SATAT Initiative

Sustainable Alternative towards Affordable Transportation (SATAT) is an initiative aimed at setting up of Compressed Bio-Gas (CBG) production plants.

- It makes CBG available in the market for use in automotive fuels by inviting Expression of Interest from potential entrepreneurs.
- The initiative was launched in October 2018 by the Ministry of Petroleum & Natural Gas in association with Public Sector Undertaking (PSU) Oil Marketing Companies (OMC).

What is the Bio-gas?

Bio-gas is **produced naturally through a process of anaerobic decomposition from waste / bio-mass sources** like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.

- **After purification**, it is compressed and called CBG.
- CBG has pure **methane content of over 95%**.

What is the CBG?

Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.

- CBG has same calorific value (~52,000 KJ/kg) and other properties like CNG.
- It can be used as an alternative, renewable automotive fuel. Given the abundance of biomass in the country.

- Compressed Bio-Gas has the potential to replace CNG in automotive, industrial and commercial uses in the coming years.

Benefits of the programme

There are multiple benefits from **converting agricultural residue, cattle dung and municipal solid waste into CBG on a commercial scale:**

- Responsible waste management, reduction in carbon emissions and pollution
- Additional revenue source for farmers
- Boost to entrepreneurship, rural economy and employment
- Support to national commitments in achieving climate change goals
- Reduction in import of natural gas and crude oil
- Buffer against crude oil/gas price fluctuations

Significance

The potential for Compressed Bio-Gas production from various sources in India is estimated at about 62 million tonnes per annum.

Mains Question:

Compressed Bio-Gas (CBG) production has potential to play a significant role as a sustainable alternative towards Affordable Transportation. Discuss.

CHROME FACTS FOR PRELIMS

INDIA-AUSTRALIA CIRCULAR ECONOMY HACKATHON (I-ACE)

- The India-Australia Circular Economy (I-ACE) Hackathon, 2021 was held between 8-11 February, 2021.
- It was organised by Atal Innovation Mission (AIM), NITI Aayog, India and The Commonwealth Scientific and Industrial Research Organisation (CSIRO).
- CSIRO is a **Australia's national science agency**.
- In this Hackathon, eight deserving innovations graduating as winners from India and Australia.
- 72 teams comprising of students and startup/ MSME from both India and Australia under four broad areas were participated.

TROPEX-21

- TROPEX-21 (Theatre Level Operational Readiness Exercise) had commenced in January 2021.

- **The exercise involving** all three Commands of the Indian Navy, the Tri-Services Command at Port Blair, and elements of Indian Army, Indian Air Force and Coast Guard.
- **The Biennial exercise** is the largest exercise conducted by Indian Navy aimed to validate its concepts of war-fighting across the entire spectrum of warfare.
- The exercise was **spread over the vast geographical expanse of Indian Ocean and its adjunct waters**, with exercise scenarios centred around the extant geopolitical situation in IOR.

NAVDEX 21 and IDEX 21

NAVDEX 21 (Naval Defence Exhibition) and IDEX 21 (International Defence Exhibition) is scheduled from 20 to 25 February 2021 in UAE.

- Defence relations between India and UAE have been steadily growing since the upgradation of bilateral relations to a '**Comprehensive Strategic Partnership**' during the visit of Crown Prince of Abu Dhabi, His Highness Sheikh Mohamed bin Zayed Al Nahyan in January 2017.
- Towards enhancing interactions between the two navies, **inaugural edition of Indian Navy – UAE Navy bilateral exercise GULF STAR – 1** was conducted in March 2018.
- The next edition of the exercise is likely to be conducted in 2021.

Anti-Tank Guided Missile Systems 'Helina' and 'Dhruvastra'

- User Trials for **Helina (Army Version) and Dhruvastra (Air Force Version) Missile Systems** have been carried out from **Advanced Light Helicopter (ALH) platform** in desert ranges.
- The missile systems have been **designed and developed indigenously** by Defence Research and Development Organisation (DRDO).
- The **Helina and Dhruvastra are third generation are the Lock on Before Launch (LOBL) fire and forget Anti-Tank Guided Missiles**.
- The system has **all-weather day and night capability** and can defeat battle tanks with conventional armour as well as with explosive reactive armour.
- It is **one of the most-advanced anti-tank weapons in the world**. Now, the missile systems are ready for induction.

'Go Electric' Campaign

- Transport Minister launched the **"Go Electric" Campaign to spread awareness on the benefits of e-mobility and EV Charging Infrastructure as well as electric cooking** in India.
- Go Electric Campaign is an **important initiative that would help in reducing the import dependence** of our country in the coming years.
- It would be an important step towards a cleaner and greener future.
- The campaign is **aimed at creating awareness at PAN-India level** and is expected to boost the confidence of Electric Vehicle manufacturers.

GENERAL STUDIES - II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)

Context

Recently, the operational guidelines for Integration of NAFLD (Non-Alcoholic Fatty Liver Disease) was launched with **NPCDCS (National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke)**.

What is the NAFLD?

Non-alcoholic fatty liver disease (NAFLD) is a very common disorder and refers to a group of conditions where there is **accumulation of excess fat in the liver of people** who drink little or no alcohol.

- The most common form of NAFLD is a **non-serious condition called fatty liver**. In fatty liver, fat accumulates in the liver cells.
- NAFLD may have a more serious condition called **non-alcoholic steatohepatitis (NASH)**.
- In NASH, **fat accumulation is associated with liver cell inflammation** and different degrees of scarring.
- NASH is a potentially serious condition that may lead to severe liver scarring and cirrhosis and even liver cancer.

Causes of NAFLD/NASH:

Researchers are focusing on several factors that may contribute to the development of NASH. These include:

- **Oxidative stress** (imbalance between pro-oxidant and anti-oxidant chemicals that lead to liver cell damage).
- Production and release of **toxic inflammatory proteins (cytokines)** by the patient's own inflammatory cells, liver cells, or fat cells.
- **Liver cell necrosis or death**, called apoptosis.
- **Adipose tissue (fat tissue) inflammation** and infiltration by white blood cells.
- **Gut microbiota (intestinal bacteria)** which may play a role in liver inflammation.

Prevalence of disease:

Over the last two decades **global burden of NASH** has become more than doubled. Globally, NASH caused 40 lakh prevalent cases of compensated cirrhosis in 1990, which increased to 94 lakh cases in 2017.

- NAFLD is emerging as an important cause of liver disease in India.
- Epidemiological studies suggest the prevalence of NAFLD is around 9% to 32% of the general population in India.
- NAFLD have higher prevalence in those **with overweight or obesity** and those with **diabetes or prediabetes**.
- Researchers have found **NAFLD in 40% to 80 % of people who have type 2 diabetes** and in **30% to 90 % of people who are obese**.
- Studies also suggest that people with NAFLD have a **greater chance of developing cardiovascular disease**.
- Cardiovascular disease is the **most common cause of death in NAFLD**.

Treatment:

- Once the disease develops, **there is no specific cure available**.
- The health promotion and prevention aspects targeting weight reduction, healthy lifestyle, and control of aforementioned risk factors are the mainstays to disease progression and prevent the mortality and morbidity due to NAFLD.

Government's plan to curb deaths due to NCDs linked with the condition:

India is becoming the first country in the world to identify the need for action for NAFLD.

The Government of India has **realized that the existing NCD programme's strategies** can now be aligned **to achieve the objectives to prevent and control NAFLD with:**

1. behavior and lifestyle changes,
2. early diagnosis and management of NAFLD,
3. building of capacity at various levels of healthcare for prevention, diagnosis and treatment of NAFLD.

Importance of the Ayushman Bharat- Health and Wellness Centres (AB-HWCs) in curbing NCDs:

The Ayushman Bharat programme has so far screened **838.39 lakh people for hypertension, 683.34 lakh for diabetes** and **806.4 lakh for the three common forms of cancer** through the HWCs.

- They have so far **organised 6.91 lakh yoga and wellness sessions** at the community level.
- Apart from **treating the poorest of the poor**, they are also mandated to inculcate healthy living at the grassroots among the community.
- Along with the focus of **'Eat Right India' and 'Fit India Movement'**, the entire vision of the government is to move from Diagnostic Cure to Preventive Health".

GENERAL STUDIES - II

Topic– Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

SFURTI CLUSTERS

Context:

Union Minister for MSME, recently, inaugurated 50 artisan-based SFURTI clusters, spread over 18 States. In the 50 clusters.

What are the SFURTI clusters?

The Scheme of Fund for Regeneration of Traditional Industries (SFURTI) is being implemented by the Ministry of MSME.

- It aims to organize traditional industries and artisans into clusters to make them competitive and increase their income.
- The Ministry of MSME, has funded an amount of around Rs.85 crore for development of these 50 clusters.
- The **scheme focuses on** strengthening the cluster governance systems with the active participation of the stakeholders.
- These clusters are spread all over the country covering 248 districts.
- The Ministry aims to support **at least 1 cluster in each district** in the coming period.

What it do?

Under the Scheme, the Ministry supports various interventions including:

- **Setting up of infrastructure through** Common Facility Centers (CFCs),
- Procurement of new machineries,
- Creating raw material banks, design intervention,
- Improved packaging,
- Improvement of marketing Infrastructure,
- Improved skills and capacity development through training and exposure visits, etc.

Key features of SFURTI clusters:

SFURTI clusters are of two types:

1. Regular Cluster (500 artisans) with **Government assistance of up to Rs.2.5 crore**, and
2. Major Cluster (more than 500 artisans) with **Government assistance up to Rs.5 crore**.

Significance and benefits:

Over 42,000 artisans, under this scheme, have been supported in the traditional segments of muslin, khadi, coir, handicraft, handlooms, wood craft, leather, pottery, carpet weaving, bamboo, agro processing, tea, etc.

As on date, there are 371 numbers of Clusters which have are being funded by the Ministry, supporting 2.18 lakh artisans with a total Government assistance of Rs. 888 cr.

Topic– Major Crops – cropping patterns in various parts of the country.

SAFFRON BOWL OF INDIA EXTENDS TO THE NORTH EAST

Context

NECTAR undertakes a pilot project to explore feasibility of growing saffron in North East region.

Highlights

- Jammu and Kashmir is called the **Saffron bowl of India**.
- The saffron bowl, **which was so far confined to Kashmir**, may soon expand to the North East of India.
- Plants from **seeds transported from Kashmir to Sikkim and acclimatized** there are now flowering in **Yangyang in the Southern part of the North-East state**.
- **Similarity of climatic and geographical conditions** between Pampore (Kashmir) and Yangyang (Sikkim) leads to successful sample farming of Saffron in Yangyang

Saffron production in India

Saffron production has long been restricted to a **limited geographical area in the Union territory of Jammu & Kashmir**.

- **Pampore region, in India, commonly known as Saffron bowl of Kashmir**, is the main contributor to saffron production, followed by Budgam, Srinagar, and Kishtwar districts.
- Saffron has traditionally been associated with the **famous Kashmiri cuisine**.
- It's its **medicinal values** were considered as part of the **rich cultural heritage of Kashmir**.
- As saffron growing was confined to very specific areas in Kashmir, its production remained limited.
- Though the **National Mission on Saffron** focused on several measures to improve its farming, the measures were still limited to the specified areas of Kashmir.

National Saffron Mission (NSM)

National Saffron Mission (NSM) **launched by the Centre in 2010**

- **It aims to boost saffron cultivation has failed to yield the desired results** even though the five-year project was extended by another two years in October 2015.
- The project's report card is dismal if one goes by the complaints of the saffron cultivators. However, officials connected with the Mission claim it is a success.
- The NSM was enhanced to Rs 400 crore in 2015. **Its duration was extended by two years.**

North East Centre for Technology Application and Reach (NECTAR)

- NECTAR is an autonomous body under the Department of Science & Technology, Government of India.
- It is supporting a pilot project to explore the feasibility of growing saffron in North East region of India, with the same quality and higher quantity.

Mains Question:

The saffron bowl, which was so far confined to Kashmir, is now expanding to the North East of India. Discuss.

CHROME FACTS FOR PRELIMS

NATIONAL AWARDS FOR 'TECHNOLOGY INNOVATION IN PETROCHEMICALS AND DOWNSTREAM PLASTIC PROCESSING INDUSTRIES'

- **10th National Awards** for 'Technology Innovation in Petrochemicals & Downstream Plastics Processing Industries' were presented by Union Minister of Chemicals & Fertilizers.
- **These awards are aimed to** felicitate and recognize the innovative efforts of renowned scientists, researchers and industrialists in the broad areas of Polymer Science & Technologies.
- **The National Policy on Petrochemicals** was announced in April 2007.
- **The policy envisions** the development of value added, quality petrochemical products at globally competitive prices using eco-friendly processes and technologies.
- The policy promotes the Innovation of newer application and products with focus on sustainable development.

VL-SRSAM Missile System

Defence Research & Development Organisation (DRDO) conducted two successful launches of **Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)**.

- The missile system is **indigenously designed and developed by DRDO for Indian Navy**.
- **VL-SRSAM is meant for** neutralizing various aerial threats at close ranges including sea-skimming targets.
- Once deployed, the VL-SRSAM system will prove to be a force multiplier for the Navy.

National Technology Awards 2020

12 companies selected for the prestigious National Technology Awards 2020 **for commercialization of innovative indigenous technologies**.

The awards were **given by the Technology Development Board (TDB)**, a statutory body of Government of India functioning under Department of Science of Technology for the year 2019-20.

About TDB:

The Technology Development Board is a statutory body of Government of India functioning under Department of Science of Technology.

- It provides **financial assistance to companies working for commercialization of indigenous technologies** and adaptation of imported technologies for domestic applications.
- TDB was **established in 1996** with a novel aim of providing financial assistance to Indian companies for commercialization of innovative indigenous technologies.

PIB-FEBRUARY 24th, 2021

GENERAL STUDIES -II

Topics - *India and its neighborhood- relations.*

INDIA AND MAURITIUS RELATIONSHIP

Context:

A **Comprehensive Economic Cooperation and Partnership Agreement (CECPA)** was signed between India and Mauritius in Port Louis.

Highlights:

CECPA is the **first trade Agreement signed by India with a country in Africa.**

The Agreement is a **limited agreement**, which will cover Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Customs Procedures and Cooperation in other Areas.

Impact/benefits:

- CECPA **provides for an institutional mechanism** to encourage and improve trade between the two countries.
- The CECPA between India and Mauritius **covers 310 export items for India.**
- Mauritius will benefit from **preferential market access into India for its 615 products.**
- **As regards trade in services**, Indian service providers will have access to around 115 sub-sectors from the 11 broad service sectors.
- India has offered around 95 sub-sectors from the 11 broad services sectors.

- Both sides have also agreed to negotiate an **Automatic Trigger Safeguard Mechanism (ATSM)** for a limited number of highly sensitive products within two years of the Signing of the Agreement.

India – Mauritius Relations:

Mauritius is increasingly becoming an **integral part of India's Ocean Diplomacy goals**.

Though the **multi-faceted nature of Mauritius-India relations** is often discussed and acknowledged by both countries and reflected in the frequent online conversations that have taken place between its leaders in the recent months.

Diplomatic relations:

- Diplomatic relations between India and Mauritius were **established in 1948**.
- Mauritius **maintained contacts with India through successive Dutch, French and British occupation**.
- **From 1820s**, Indian workers started coming to Mauritius to work on sugar plantations.
- **From 1834**, when **slavery was abolished by the British Parliament**, large numbers of Indian workers began to be brought to Mauritius as indentured labourers.
- **November 2, 1834** marks the day when the ship '**Atlas**' docked in Mauritius carrying the **first batch of Indian indentured labourers**.
- This day is now observed in Mauritius as '**Aapravasi Day**'.
- At present, **around 68% of the Mauritian population is of Indian descent**.

Political Relations:

Following **Mauritius' independence on March 12, 1968**, the first Prime Minister and the **Father of the Mauritian Nation Sir Seewoosagur Ramgoolam** accorded centrality to India in Mauritius' foreign policy.

- Subsequently, successive Mauritian leaders ensured that India occupies a position of significance and importance in the foreign policy orientation and activities of Mauritius.
- India and Mauritius have signed a wide range of bilateral agreements and MoUs.

Commercial Relations:

India is **Mauritius' largest trading partner** and has been the largest exporter of goods and services to Mauritius since 2007.

- **India's exports to Mauritius** comprise largely of petroleum products.
- Besides petroleum products, main items of India's exports to Mauritius are **pharmaceuticals, cereals, cotton, electrical machinery, apparel and clothing accessories**.
- **Main items of Mauritius' exports to India** are iron and steel, pearls, precious/semi-precious stones and optical, photographic and precision instruments.

- **Cumulative FDI equity inflows from Mauritius to India** during the period April 2000-September 2015 amounted to USD 91.22 billion (34% of total FDI inflows over this period), largely due to the **Double Taxation Avoidance Convention**.
- Over the past forty years, **India has extended several Lines of Credit to Mauritius** to assist in the development of its infrastructure, human resource, skills development, capacity building, project appraisal, etc.

Cultural Relations:

The **Indira Gandhi Centre for Indian Culture (IGCIC)** at Phoenix is one of the largest centres of ICCR, which from March 2000, has emerged as an important venue for promotion of Indian cultural activities in Mauritius.

- A **Cultural Exchange Programme (CEP)** (2015-2018) was signed in March 2015.
- **The Mahatma Gandhi Institute (MGI)** was established in 1970 as a joint venture between the Government of India and the Government of Mauritius for the promotion of Indian culture and education.

GENERAL STUDIES - II

Topic– *Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.*

MISSION INDRADHANUSH (IMI) 3.0

Context:

Various States and UTs have started implementation of the Intensified Mission Indradhanush 3.0.

About IMI 3.0:

It is a campaign aimed **to reach those children and pregnant women** who have been missed out or been left out of the Routine Immunisation Programme.

- **This is aimed** to accelerate the full immunisation of children and pregnant women through a mission mode intervention.
- The first phase has been rolled out from 22nd Feb. for 15 days,
- It is being **conducted in pre-identified 250 districts/urban areas across 29 States/UTs** in the country.
- **Beneficiaries from migration areas and hard to reach areas will be targeted** as they may have missed their vaccine doses during the pandemic.

Classification of districts:

As per the guidelines released for IMI 3.0, the districts have been classified to reflect 313 low risk; 152 medium risk; and 250 high risk districts.

What is the Mission Indradhanush?

'Mission Indradhanush' was launched by the Government of India in Decmber 2014.

- It was aimed to strengthen and re-energize the programme and achieve full immunization coverage for all children and pregnant women.
- The ultimate goal of Mission Indradhanush is to ensure full immunization with all available vaccines for children up to two years of age and pregnant women.

Intensified Mission Indradhanush (IMI) 2.0:

'Intensified Mission Indradhanush 2.0' was launched on October 31, 2019 **to ensure that not a single child in the country misses out on vaccination.**

- It had a special focus on improving coverage in areas with "low" immunisation.
- **Through 'IMI 2.0', the health ministry aims to reach** each and every child below the age of two years and all pregnant women still **uncovered/partially covered in 271 districts** of the country.

GENERAL STUDIES - III

Topic– *Government policies and interventions for development in various sectors and issues arising out of their design and implementation.*

NATIONAL URBAN DIGITAL MISSION (NUDM)

Context:

Government has launched National Urban Digital Mission (NUDM) & Several Digital Initiatives Launched for Transforming Urban Governance.

What is NUDM?

National Urban Digital Mission aims **to build the shared digital infrastructure** that will strengthen the capacity of the urban ecosystem to solve complex problems at scale and speed.

1. It will **institutionalise a citizen-centric and ecosystem-driven approach** to urban governance and service delivery **in 2022 cities by 2022, and across all cities and towns in India by 2024.**
2. NUDM has articulated a set of governing principles, and inherits the technology design principles of the **National Urban Innovation Stack (NUIS).**
3. The principles in turn give rise to standards, specifications, and certifications, across the **three pillars of people, process, and platforms.**

India Urban Data Exchange (IUDX):

The India Urban Data Exchange has been **developed in partnership between the Smart Cities Mission and the Indian Institute of Science (IISc), Bengaluru.**

- IUDX serves as a seamless interface for data providers and data users, including ULBs, to share, request, and access datasets related to cities, urban governance, and urban service delivery.
- IUDX is an **open-source software platform** which facilitates the secure, authenticated, and managed exchange of data amongst various data platforms, 3rd party authenticated and authorised applications, and other sources.
- IUDX is **designed to address the problem of data silos**, both within and across cities.

SmartCode Platform:

SmartCode is a platform that **enables all ecosystem stakeholders to contribute to a repository of open-source code** for various solutions and applications for urban governance.

- It is designed **to address the challenges that ULBs face** in the development and deployment of digital applications to address urban challenges.
- It enables cities to take advantage of existing codes and customising them to suit local needs, rather than having to develop new solutions from scratch.
- As a repository of open-source software, the **source code available on the platform will be free to use without any licensing or subscription fees.**

CHROME FACTS FOR PRELIMS

NAGALAND: ENHANCING CLASSROOM TEACHING AND RESOURCES PROJECT

- The **Government of India, Government of Nagaland and the World Bank** has signed a \$68 million project **to enhance the governance of schools across Nagaland** as well as to improve teaching practices and learning environments in select schools.
- The **“Nagaland: Enhancing Classroom Teaching and Resources Project”** will improve classroom instruction; create opportunities for the professional development of teachers; and build technology systems to provide students and teachers with more access to blended and online learning as well as allow better monitoring of policies and programs.

Smart Cities Mission:

Since **its launch in 2015**, the Smart Cities Mission has made significant strides in its efforts to ensure that the benefits of technology reach all citizens.

- Over the last year, the Mission has seen accelerated project implementation with Smart Cities focusing on grounding and completion of projects.
- Of the total committed investments of ₹2,05,018 crore as per approved Smart Cities Plans, as on 21.02.2021

GENERAL STUDIES - II

Topic– *Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes;*

PM-KISAN SCHEME

Context:

The PM-Kisan scheme, launched with an aim to ensure a life of dignity and prosperity for farmers has completed two years on 24 February.

What is the PM-Kisan scheme?

The **Pradhan Mantri Kisan Samman Nidhi Yojana (PM-Kisan Yojana)** is a government scheme through which, all small and marginal farmers will get up to Rs 6,000 per year as minimum income support.

This 75,000-crore scheme aims to cover 125 million farmers, irrespective of the size of their landholding in India.

PM-KISAN Scheme

- PM Kisan is a Central Sector scheme with 100% funding from Government of India.
- It has become operational from 1.12.2018.
- Under the scheme an income support of 6,000/- per year in three equal installments will be provided to small and marginal farmer families having combined land holding/ownership of upto 2 hectares.
- Definition of family for the scheme is husband, wife and minor children.
- State Government and UT administration will identify the farmer families which are eligible for support as per scheme guidelines.
- The fund will be directly transferred to the bank accounts of the beneficiaries.
- The first instalment for the period 1.12.2018 to 31.03.2019 is to be provided in the financial year itself.
- There are various Exclusion Categories for the scheme.

When did the PM-Kisan scheme come into effect?

The PM Kisan Yojana came into effect **from December 1, 2018**. It was launched by prime minister Narendra Modi-led government.

Key features of the scheme:

- Under the PM Kisan Yojana, **income support of Rs 6000 per annum** is provided to all eligible farmer families across the country in **three equal installments of Rs 2,000** each every four months.
- **The scheme defines family** as husband, wife and minor children.
- The fund of Rs 2,000 is directly transferred to the bank accounts of the farmers/farmer's family.

Who is eligible for PM Kisan scheme?

- Landholding farmers' families with cultivable landholding in their names can apply under this scheme.
- Farmers from both the urban and rural areas.
- Small and marginal farmer's families.

Who is not eligible for PM Kisan scheme?

- Institutional landholders
- Present or retired officers and employees of state/central government as well as PSUs and government autonomous bodies.
- Beneficiaries with higher economic status are not eligible.
- Those who pay income tax
- Farmer families holding constitutional posts
- Professionals like doctors, engineers and lawyers
- Retired pensioners with a monthly pension of over Rs 10,000

Significance:

- Around 12 crore small and marginal farmer families are expected to benefit from this.
- It would not only provide assured supplemental income to the most vulnerable farmer families, but would also meet their emergent needs especially before the harvest season.
- It would pave the way for the farmers to earn and live a respectable living.

Concerns about the Scheme:

- PM-Kisan yojana completely disregards landless tenants and poor rural households that do not own land.
- The amount transferred under the scheme accounts only a tenth of the production cost per hectare or consumption expenditure for a poor household.
- The support is largely symbolic and not sustentative.
- The cash transfer is not linked to the size of the farmer's landholding.
- There has been a huge delay in disbursements.

GENERAL STUDIES - II

Topics – Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

BRICS FINANCIAL COOPERATION MEETING

Context:

India hosts First Meeting of BRICS Finance and Central Bank Deputies.

Highlights:

- India assumed the **BRICS Chairship in 2021**, at a time when BRICS is celebrating its 15th anniversary.
- Under the theme **BRICS@15: Intra-BRICS Cooperation**, India's approach is focused on strengthening collaboration through Continuity, Consolidation and Consensus.
- This was the **first meeting** on the BRICS Financial Cooperation under India Chairship in 2021.
- During the meeting, India shared priorities under financial cooperation agenda and issues for discussion during 2021.



What is BRICS?

BRICS is the group composed by the five major emerging countries – **Brazil, Russia, India, China and South Africa.**

- It together represents about **42% of the population, 23% of GDP, 30% of the territory and 18% of the global trade.**
- The **acronym BRIC was coined by economist 'Jim O'Neill' of Goldman Sachs in 2001** to indicate the emerging powers that would be, alongside the United States, the five largest economies of the world in the 21st century.
- In 2006, BRIC countries started their dialogue, which since 2009 takes place at annual meetings of heads of state and government.
- **In 2011, with South Africa joining the group,** the BRICS reached its final composition, incorporating a country from the African continent.

Structure

- BRICS does not exist in form of organization, but it is an annual summit between the supreme leaders of five nations.
- The **Chairmanship of the forum is rotated annually** among the members, in accordance with the acronym B-R-I-C-S.
- BRICS cooperation in the past decade has expanded to include an annual programme of over 100 sectoral meetings.

Objectives

The BRICS seeks to deepen, broaden and intensify cooperation within the grouping and among the individual countries for more sustainable, equitable and mutually beneficial development.

- The BRICS countries act as one to promote a more legitimate international system, including **advocating reform of the UN Security Council.**
- The BRICS group is a **South-South framework for cooperation.**
- **To provide an alternative of the current governance of Western financial institutions like the International Monetary Fund and the World Bank** for that they have announced the establishment of the bank.

BRICS on global institutional reforms

The BRICS **was formed initially for co-operation to start among the BRICs nation was the financial crises of 2008.**

- The crises raised doubts over sustainability of the **dollar-dominated monetary system.**
- **The BRICs called for** the “the reform of multilateral institutions in order that they reflect the structural changes in the world economy and the increasingly central role that emerging markets now play”.
- BRICs managed to push for institutional reform which led to **International Monetary Fund (IMF) quota reform in 2010.**

Challenges before BRICS

- The marked **dominance of big three Russia-China-India** is challenge for the BRICS.
- To become a true representative of large emerging markets across the world, BRICS must become pan-continental.
- Its membership must include more countries from other regions and continents.
- The BRICS will need to expand its agenda for climate change and development finance, aimed at building infrastructure dominates agenda.
- As BRICS moves forward foundational principles of BRICS i.e. respect for sovereign equality and pluralism in global governance are liable to be tested as the five member countries pursue their own national agendas.

Mains Question:

The issue such as, the military standoff between India and China on the Doklam plateau, is a threat to the notion that a comfortable political relationship is always possible amongst the BRICS. Discuss.

GENERAL STUDIES - II

Topics – Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

THE INTERNATIONAL COMMISSION ON LARGE DAMS (ICOLD) SYMPOSIUM

Context:

International Commission on Large Dams (ICOLD) Symposium on Sustainable Development of Dams & River Basins inaugurated.

About the symposium:

International Commission on Large Dams (ICOLD) in collaboration with Central Water Commission (CWC), Dam Rehabilitation Improvement Project (DRIP) and National Hydrology Project (NHP) is organising Symposium on “Sustainable Development of Dams and River Basins” under the aegis of ICOLD at New Delhi.

- It is being organised to provide an excellent opportunity to Indian Dam Engineering Professionals and Agencies to share their experiences, ideas and latest developments in new materials and construction technologies.
- Besides this offers opportunity to networking with the world renowned dam experts from different countries and global organizations involved in Dam Construction, management and operation and maintenance for mutual benefits.

What is the 'International Commission on Large Dams' (ICOLD)?

The International Commission on Large Dams (ICOLD) is a **non-governmental International Organization** which provides a forum for the exchange of knowledge and experience in dam engineering.

- The Organization leads the profession in ensuring that dams are built safely, efficiently, economically, and without detrimental effects on the environment.
- **Its original aim** was to encourage advances in the planning, design, construction, operation, and maintenance of large dams and their associated civil works, by collecting and disseminating relevant information and by studying related technical questions.

Definition of a Large Dam:

A dam with a height of 15 metres or greater from lowest foundation to crest or a dam between 5 metres and 15 metres impounding more than 3 million cubic metres.

Most Frequent Causes of Dam Failures:

- **Overtopping of a dam** is often a precursor of dam failure. Overtopping can be due to inadequate spillway design, debris blockage of spillways, or settlement of the dam crest
- **Foundation defects**, including settlement and slope instability, are another cause of dam failures.
- **Piping**, that is internal erosion caused by seepage, is the third main cause. Seepage often occurs around hydraulic structures, such as pipes and spillways; through animal burrows; around roots of woody vegetation; and through cracks in dams, dam appurtenances, and dam foundations.
- **The other causes** of dam failures include structural failure of the materials used in dam construction and inadequate maintenance.

Technology of dams:

There are now **three types of hydroelectric installations**:

1. storage,
2. run-of-river, and
3. pumped-storage facilities.

Storage facilities use a dam to capture water in a reservoir, created by a dam.

This stored water is released from the reservoir through turbines at the rate required to meet changing electricity needs or other needs such as flood control, fish passage, irrigation, navigation, and recreation.

What kind of technologies are available?

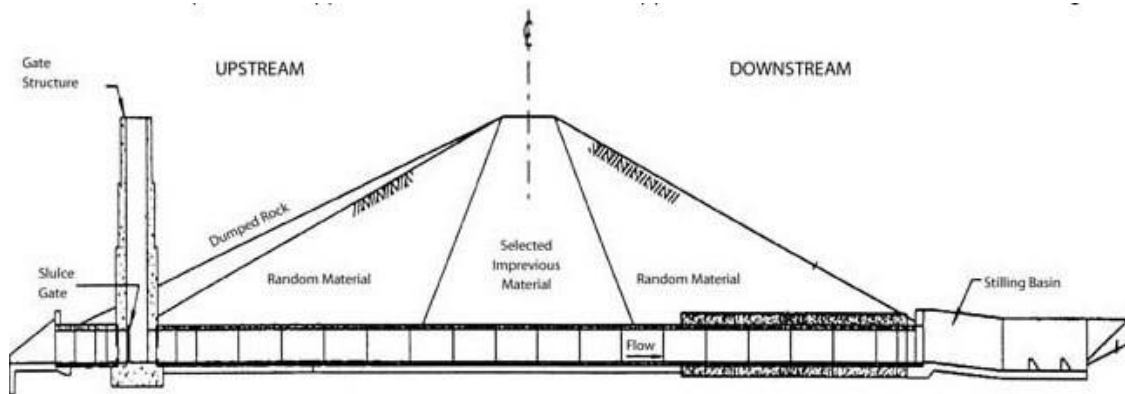
There are different possibilities to classify them, the first one being to use the material used to construct the dam.

- Dams built of concrete, stone, or other masonry are called **gravity dams, arch dams or buttress dams**.
- Dams **built of earth or rocks** are called **embankment dams**.

Embankment dams:

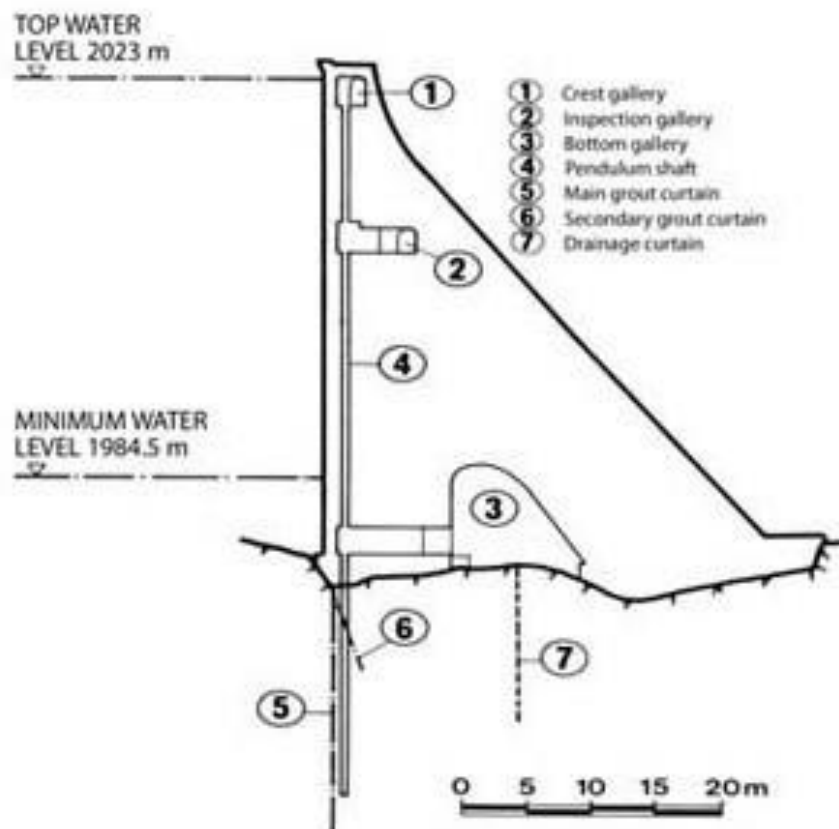
- Embankment dams are constructed of either earth fill or a combination of earth and rock fill.

- Therefore, embankment dams are generally built in areas where large amount of earth or rocks are available.
- They represent **75% of all dams in the world**.



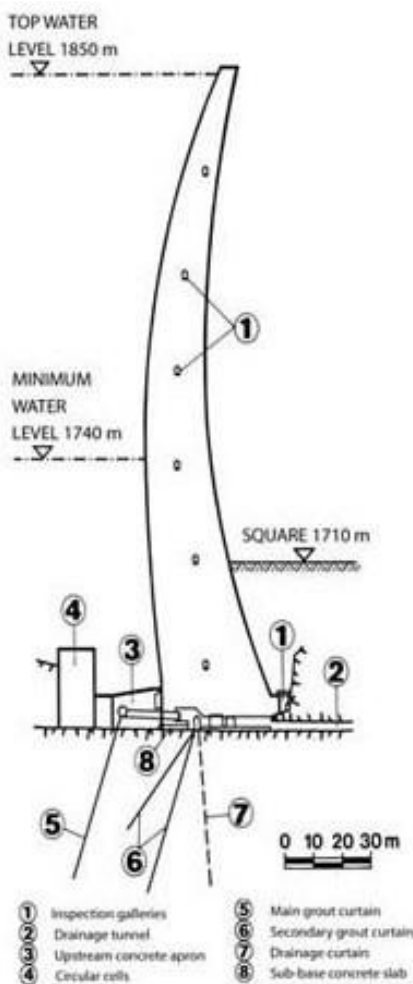
Gravity dams:

- Gravity dams depend entirely on their own weight to resist the tremendous force of stored water.
- In the earlier times, some dams have been constructed with masonry blocks and concrete.
- Today, gravity dams are constructed by mass concrete or roller compacted concrete.



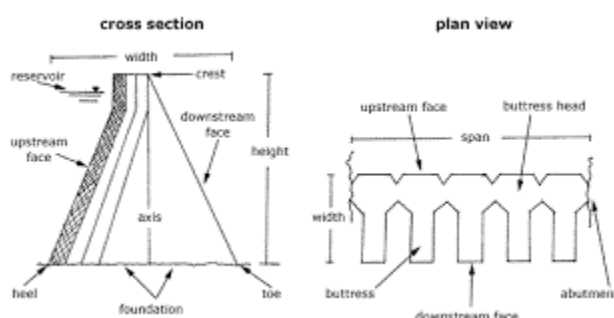
Arch dams:

- Arch dams are concrete dams that curve upstream toward the flow of water.
- They are **generally built in narrow canyons**, where the arch can transfer the water's force to the canyon wall.
- Arch dams require much less concrete than gravity dams of the same length, but they require a solid rock foundation to support their weight.



Buttress dams:

Buttress dams depend for support on a series of vertical supports called buttresses, which run along the downstream face.



CHROME FACTS FOR PRELIMS

AUGMENTED REALITY HEAD MOUNTED DISPLAY (ARHMD) SYSTEM

- Indian Army is in the process of **acquiring niche technology** by procuring quantity 556 Augmented Reality Head Mounted Display (ARHMD) Systems under Make-II Category.
- **ARHMD System** is conceived as a capability enhancement to **Land Based Air Defence Weapon Systems**, Air Defence Missile System and ZU 23mm 2B AD Gun System which will provide the operator with radar and Thermal Imaging (TI) sight outputs as overlays.
- The **proposed system intends to** enhance the engagement capability during night and conditions of inclement weather.

Chairman National Commission for Scheduled Castes (NCSC)

Shri Vijay Sampla assumed the charge of Chairman National Commission for Scheduled Castes (NCSC).

- The National Commission for Scheduled Castes is an **Indian constitutional body**.
- It is established with a view to provide safeguards against the exploitation of Scheduled Castes and Anglo Indian communities to promote and protect their social, educational, economic and cultural interests, special provisions were made in the Constitution.
- **Article 338** of the Indian constitution deals with National Commission for Scheduled Castes.
- **Article 338 A** deals with National Commission for Scheduled tribes.

PIB-FEBRUARY 26th, 2021

GENERAL STUDIES - III

Topic– Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

INFORMATION TECHNOLOGY (INTERMEDIARY GUIDELINES AND DIGITAL MEDIA ETHICS CODE) RULES - 2021

Context:

The Government, in exercise of powers under section 87 (2) of the Information Technology Act, 2000, has framed the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021**.

These rules will supersede the **earlier Information Technology (Intermediary Guidelines) Rules 2011**.

- The Information Technology Rules, 2021 will let govt regulate digital news platforms.
- It will also be applicable to OTT content providers.
- The new document cites powers conferred to it under Section 87 of the Information Technology Act, 2000.

Salient Features of the Information Rules 2021:

- **Due Diligence to Be Followed by Intermediaries:** The Rules prescribe due diligence that must be followed by intermediaries, including social media intermediaries.
- **Grievance Redressal Mechanism:** Intermediaries **shall appoint a Grievance Officer** to deal with such complaints and share the name and contact details of such officer.
- **Ensuring Online Safety and Dignity of Users, Specially Women Users:** Intermediaries shall remove or disable access **within 24 hours of receipt of complaints of contents** that exposes the private areas of individuals, show such individuals in full or partial nudity or in sexual act or is in the nature of impersonation including morphed images etc.
- Such a complaint **can be filed either by the individual or by any other person on his/her behalf**
- **Two Categories of Social Media Intermediaries:** This distinction is based on the number of users on the social media platform. **Government is empowered to notify the threshold of user base** that will distinguish between social media intermediaries and significant social media intermediaries.
- **Voluntary User Verification Mechanism:** Users who wish to verify their accounts voluntarily shall be provided an appropriate mechanism to verify their accounts and provided with demonstrable and visible mark of verification.
- **Digital Media Ethics Code Relating to Digital Media and OTT Platforms to Be Administered by Ministry of Information and Broadcasting.**
- The Rules establish a soft-touch **self-regulatory architecture and a Code of Ethics** and three tier grievance redressal mechanism for news publishers and OTT Platforms and digital media.
- **Oversight Mechanism:** Ministry of Information and Broadcasting shall formulate an oversight mechanism. It shall publish a charter for self-regulating bodies, including Codes of Practices.

Safeguarding Users' Rights,
Ensuring Responsible Internet
Freedom

Govt Notifies IT Rules, 2021

(Intermediary Guidelines &
Digital Media Ethics Code)



Code Of Ethics For Online News, OTT Platforms & Digital Media

Self-Classification of Content:

- ▶ The OTT platforms to self-classify the content into 5 age-based categories - U (Universal), U/A 7+, U/A 13+, U/A 16+, and A (Adult)
- ▶ Platforms to implement parental locks for content classified as U/A 13+ or higher & reliable age verification mechanisms for content classified as "A"
- ▶ Publisher of online curated content to prominently display the classification rating & advising on viewer description at the beginning of every programme

Publishers of news on digital media to observe the Norms
of Journalistic Conduct of the PCI* & the Programme Code

*Press Council of India

Safeguarding Users' Rights,
Ensuring Responsible Internet
Freedom

Govt Notifies IT Rules, 2021

(Intermediary Guidelines &
Digital Media Ethics Code)



Removal of Unlawful Information

An intermediary upon receiving actual knowledge in the
form of an order by a court or by the Appropriate Govt.
or its agencies not to host or publish any information
which is prohibited under any law

The Rules to come in effect from the date of the
publication in the gazette, except for significant social
media intermediaries, which will come in effect 3 months
after publication

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Freedom

Govt Notifies IT Rules, 2021

(Intermediary Guidelines &
Digital Media Ethics Code)
(2/2)



Measures to be Ensured by Significant Social Media Intermediaries

Intermediary providing services primarily in the nature of messaging to enable identification of the first originator of the information required for prevention, detection, investigation, prosecution of an offence related to:

- ▶ Sovereignty & integrity of India, security of the State, relations with foreign States, or public order, incitement to an offence in relation with rape, sexually explicit material, etc. punishable with imprisonment for a term of 5 years
- ▶ Intermediary not required to disclose the contents of any message or any other information to the first originator
- ▶ Intermediary to have a physical contact address in India published on its website or app or both

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Govt Notifies IT Rules, 2021

(Intermediary Guidelines &
Digital Media Ethics Code)
(1/2)



Measures to be Ensured by Significant Social Media Intermediaries

Appoint a resident Chief Compliance Officer who shall be responsible for ensuring compliance with the Act and Rules

Appoint a resident Nodal Contact Person for 24x7 coordination with law enforcement agencies

Appoint a resident Grievance Officer who shall perform the functions mentioned under Grievance Redressal Mechanism

Publish a monthly compliance report mentioning the details of complaints received and action taken on the complaints as well

Safeguarding Users' Rights,
Ensuring Responsible Internet
Freedom

Govt Notifies IT Rules, 2021

(Intermediary Guidelines &
Digital Media Ethics Code)



Voluntary User Verification & Giving them Opportunity to Be Heard

Users wishing to verify their accounts voluntarily to be provided an appropriate mechanism & provided with a demonstrable & visible mark of verification

In cases where significant social media intermediaries remove or disable access to any information, then a prior intimation to be communicated to the user who has shared that information with a notice explaining the grounds &

- Users must be provided an adequate & reasonable opportunity to dispute the action taken by the intermediary

Background:

The extensive spread of mobile phones, Internet etc. has also enabled many social media platforms to expand their footprints in India. Some portals have reported the following numbers as user base of major social media platforms in India:

1. WhatsApp users: 53 Crore
2. YouTube users: 44.8 Crore
3. Facebook users: 41 Crore
4. Instagram users: 21 Crore
5. Twitter users: 1.75 Crore

Proliferation of social media, on one hand empowers the citizens then on the other hand gives rise to some serious concerns and consequences which have grown manifold in recent years.

- These concerns have been raised from time to time in various forums including in the Parliament and its committees, judicial orders and in civil society deliberations in different parts of country.
- Such concerns are also raised all over the world and it is becoming an international issue.

Evolution of Social Media and Other Intermediaries:

The evolution of social media intermediaries, are no longer **limited to playing the role of pure intermediary** and often they become publishers.

- These Rules are a fine blend of liberal touch with gentle self-regulatory framework.
- In respect of news and current affairs publishers are expected **to follow the journalistic conduct of Press Council of India** and the Programme Code under the Cable Television Network Act, which are already applicable to print and TV. Hence, only a level playing field has been proposed.

Rationale and Justification for New Guidelines:

These Rules substantially empower the ordinary users of digital platforms to seek redressal for their grievances and command accountability in case of infringement of their rights. In this direction, the following developments are noteworthy:

- The **Supreme Court in suo-moto writ petition (Prajawala case)** had observed that the Government of India may frame necessary guidelines to eliminate child pornography, rape and gangrape imageries, videos and sites in content hosting platforms and other applications.
- There was a **Calling Attention Motion** on the misuse of social media and spread of fake news in the Rajya Sabha.
- The Minister had conveyed the resolve of the Government to strengthen the legal framework and make the social media platforms accountable under the law.
- **The Ad-hoc committee of the Rajya Sabha** laid its report after studying the alarming issue of pornography on social media and its effect on children and society as a whole and recommended for enabling identification of the first originator of such contents.

GENERAL STUDIES - III

Topic– *Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.*

NORTH EAST CANE AND BAMBOO DEVELOPMENT COUNCIL (NECBDC)

Context:

Recently, the latest technology Integrated Bamboo Treatment Plant was inaugurated near Guwahati.

- The Union Territory of Jammu & Kashmir will set up three Bamboo Clusters through technical knowhow and collaboration from North East Cane and Bamboo Development Council (NECBDC).
- Each of the three clusters will be devoted to the production of Agarbatti, baskets and charcoal respectively.

About NECBDC:

Formerly known as 'Cane and Bamboo Development Council' (CBDC), NECBDC was incorporated with the objective of organizing the hitherto untapped bamboo sector of North East India.

- **The Cane and Bamboo Technology Centre (CBTC)** came into existence with a coordinated effort led by North Eastern Development Finance Corporation (NEDFC) with the Government of India (GoI), Department of Science and Technology, **United Nations Development Programme (UNDP)** and **United Nations Industrial Development Organisation (UNIDO)**.
- It provides support to the North Eastern communities to the possibility of a healthy future.
- **CBTC aims to offer** livelihood opportunities that stem from the rich harvest of bamboos. It works as a matchmaker of bamboo, human resources and technology.

'Cane and Bamboo' in J&K:

Union Territory of Jammu and Kashmir has **huge Bamboo reserves** that can boost its economy in future.

- Bamboo cultivation can revolutionise the industry in Jammu and Kashmir in a cost-effective manner and can open new gates for the young start-ups.
- The UT Govt. is in the process of identifying 100 venues and will identify the programs to be held there in the first phase.
- Three **new Bamboo Technology Parks in Jammu, Srinagar and Leh** would be set up in consonance with the **National Bamboo Mission (NBM)**.

National Bamboo Mission (NBM)

- The mission was **launched in April 2018**.
- **It aims to** increase area under bamboo cultivation and also adopting region based strategies to promote bamboo products.
- The NBM envisages promoting holistic growth of bamboo sector by adopting area-based, regionally differentiated strategy and to increase the area under bamboo cultivation and marketing.
- The NBM will be a **sub-scheme of National Mission on Sustainable Agriculture (NMSA) under the umbrella scheme Krishonnati Yojana**.

Objective of NBM

- **To increase the area** under bamboo plantation in **non-forest Government and private lands**.
- **To supplement farm income** and contribute towards resilience to climate change as well as availability of quality raw material for industries.
- To establish innovative primary processing units near the source of production, primary treatment and seasoning plants, preservation technologies and market infrastructure.
- To re-align efforts so as to reduce dependency on import of bamboo and bamboo products.

Funding

- 60:40 between Centre and State Govt. for all States (excepting NE & Hilly states),
- 90:10 for the NE & Hilly States,
- 100% for Union Territories/R&D Institutes/Bamboo Technology Support Groups (BTSGs) and National Level Agencies.

Need and significance of NBM:

In India Bamboo covers 13.96 million hectares. The mission has special cover the North Eastern States.

- To encourage Bamboo cultivation will make sure the grass is available in the manufacturing process of Bamboo handicrafts.
- Apart from North Eastern Regions, the mission is also spread across Kerala, Tamil Nadu, Gujarat, Telangana, Andhra Pradesh, Jharkhand, Bihar, Uttarakhand, Karnataka, Odisha, Chattisgarh, Maharashtra, Madhya Pradesh.

Mains Question:

The Bamboo has been removed from the definition of trees. What are the implications of it? Describe the key features and significance of National Mission on Sustainable Agriculture (NMSA).

GENERAL STUDIES - II

Topic– Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

CITY INNOVATION EXCHANGE (CIX)

Context:

Ministry of Housing and Urban Affairs has launched a City Innovation Exchange (CiX) platform for Fostering Innovation in Urban Ecosystem.

What is 'City Innovation Exchange' (CiX)?

The City Innovation Exchange (CiX) will **connect cities to innovators across the national ecosystem** to design innovative solutions for their pressing challenges.

- The platform will ease the discovery, design & validation of solutions through a robust, transparent and user centric process that will reduce barriers for innovators and cities to discover fitting solutions.
- **Built on the concept of 'open innovation'**, the platform will help in the flow of ideas 'outside in and inside out', enhancing the skills and capacity required to deliver smart urban governance.

- The platform in due time **will help our cities in adopting solutions** that will enhance the quality of life for its residents and significantly improve the Ease of Doing Business.

Role and Significance:

The platform will be a significant addition to the growing innovation ecosystem of India and focuses on fostering innovative practices in cities.

- CiX, through an '**open innovation**' process, engages with innovators to design-test-deliver on solutions to pressing urban challenges.
- This initiative is among the ongoing efforts of the Government to realise Atma Nirbhar Bharat, by making cities more self-reliant and enabled to meet the needs of and provide services to their citizens.

CHROME FACTS FOR PRELIMS

KHELO INDIA NATIONAL WINTER GAMES

The second edition of the Khelo India Winter Games is set to be held in **Gulmarg, Jammu and Kashmir this year.**

- The Games will be held from 26th February to 2nd March, 2021.
- The event has been **organised by the Union Ministry of Youth Affairs and Sports, in collaboration with the J&K Sports Council and the Winter Games Association of J&K.**
- The sports activities will include alpine skiing, nordic ski, snowboarding, ski mountaineering, ice hockey, ice skating, ice stock etc.
- 27 States, Union Territories and Boards are sending their teams to participate in the games.
- **The first edition of the Khelo India Winter Games** was also held at **Gulmarg in March 2020** and was a roaring success.

Khelo India is a national sports development programme launched by the government in a bid to revive the sports culture in India at the grass-root level, thereby turning India into a sporting nation.

India Toy Fair 2021

The Fair will be held from 27th February to 2nd March 2021.

- **It aims to bring together** all stakeholders including buyers, sellers, students, teachers, designers etc. on a virtual platform to create sustainable linkages and encourage dialogue for the overall development of the industry.
- Through this platform, the Government and the Industry shall come together to discuss how India can be made the next global hub for manufacturing and sourcing of toys by way of attracting investments in the sector and promoting exports.

GENERAL STUDIES - III

Topic– *Conservation, environmental pollution and degradation, environmental impact assessment.*

SUSTAINABLE DEVELOPMENT FOR COAL SECTOR

Context:

Government has put major thrust on sustainable development in coal mining and is taking multi-pronged action on both environmental & social fronts.

- Ministry of Coal has moved forward with a **comprehensive Sustainable Development Plan** and has initiated its speedy implementation.
- **Primary focus is on making immediate social impact** through Out of Box (OoB) measures besides regular environmental monitoring and mitigation during mining operation.

These OoB measures include:

1. Use of surplus Mine Water for irrigation & drinking purpose in and around mining areas,
2. Extraction & use of Sand from Overburden (OB),
3. Promoting Eco-Mine Tourism, encouraging Bamboo Plantation, etc.

Utilization of Mine Water:

Top most priority is being given to gainful utilization of Mine Water for irrigation & providing treated water for drinking to rural population in & around command area of mining subsidiaries of CIL, SCCL & NLCIL.

- Huge volume of mine water released during mining operation is partially utilized for internal consumption by **coal mines for providing drinking water in their colonies, dust suppression, industrial use, plantation etc.**
- **The internal consumption** constitutes about 45 % of total mine water leaving a substantial volume for community use.

Eco Parks:

10 new Eco-Parks in different mining areas are under different stages of development in various subsidiaries of CIL, SCCL & NLCIL and will be completed in next 2 years.

- Coal companies have **already developed 15 eco-parks** in various coalfields.
- **The Saoner Eco Park of WCL near Nagpur** is running Eco-Mine Tourism Circuit, a first of its kind in India, in collaboration with MTDC.
- In these parks people can visit and see mining operation of both Opencast & Underground Mines.
- There is a likely plan to start **Eco-Mine Tourism Circuit** in different coal companies to showcase efforts made by coal companies in environmental protection.

- **Bamboo Plantation along coal transport roads** and on the edges of mines will help in minimizing dust pollution.

Extraction and use of Sand from Over Burden (OB):

Extraction of sand from Over Burden (OB) for use **as construction & stowing material** is another unique initiative promoting sustainable development through gainful utilization of wastes generated during mining.

- This will not only help in **availability of cheaper sand for house & other construction** but will also **minimize the land required for OB dump** in future projects.
- This initiative also **lowers the adverse footprint of riverbed mining** of sand.

First Mile Connectivity:

- First Mile Connectivity (FMC) is another major sustainable initiative by coal companies.
- Under this, **coal is being transported through conveyor belt from Coal Handling Plants to Silo for loading.**
- This process **eliminates movement of coal through road** and thus not only minimizes the environmental pollution, but also reduces the carbon footprint.

Renewable Energy:

- Towards use of renewable energy, **CIL has set a target to establish 3 GW of Solar PV projects** by FY24 to become self-reliant in electricity.
- In addition, **1 mega SPV Project with 1000 MW capacity** will be set up in joint collaboration of CIL & NLCIL with an investment of Rs. 4000 Cr.

Bio Reclamation and Tree Plantation:

Bio-Reclamation and massive tree plantation has been one of the key thrust areas of coal companies in promoting environmental sustainability.

- New techniques like **seed ball plantation** have been adopted in many mines for providing green cover on OB Dumps.
- Target of 2021-22 is to have more than **2000 hectares of affected land converted into green cover.** Monitoring of such efforts is being done through remote sensing.
- Similarly, **systematic mine closure plan with land reclamation & restoration** is also vigorously monitored to reuse the reclaimed land for agriculture purpose in future.

Way forward:

A massive **capital expenditure investment plan** on activities related to Sustainable Development in next five years has been made.

All these activities **will pave way in next 5 years** for benchmarking a much better Sustainable Development effort by Coal Industry on Economic, Environmental & Social front.

COMPETITION COMMISSION OF INDIA

Context:

Regional Office (South) of Competition Commission of India's (CCI) was inaugurated in Chennai.

- The **Chennai Office of CCI** will act as an office to facilitate enforcement, investigation, advocacy function in coordination with Delhi office.
- This regional office **will cater to the requirements of** Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Telangana and the Union Territories Puducherry and Lakshadweep.

About Competition Commission of India (CCI):

Competition Commission of India (CCI) is a **quasi-judicial statutory body** of the Government of India responsible for enforcing The Competition Act, 2002.

- It was established on 14 October 2003 and became fully functional in May 2009.
- Competition Commission of India (CCI) and Competition Appellate Tribunal (CAT) were established under the **Competition Act, 2002**.

Composition of CCI:

The CCI is composed of a **Chairperson and 6 members**.

- The members of CCI are appointed by the Central Government.
- The CCI acts as a market regulator to check on the ill competitive practices in India.

Objectives:

- To prevent practices having adverse effect on competition.
- Make the markets work for the benefit and welfare of consumers.
- To promote and sustain competition in markets.
- To protect the interests of consumers.

The Competition Appellate Tribunal:

- The Competition Appellate Tribunal (**CAT**) was formed in 2009.
- It is a **fully empowered body by the Constitution of India**.
- The final appeal after this tribunal can be made in the Supreme Court of India.

The Competition Act, 2002

- The idea of Competition Commission was conceived and introduced in the form of The Competition Act, 2002.
- It was enacted **to promote competition and private enterprises especially in the light of 1991 Indian economic liberalization**.
- The Competition Act, 2002, is **amended by the Competition (Amendment) Act, 2007**.

- The Act prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and Merger and acquisition), which causes or likely to cause an appreciable adverse effect on competition within India.

GENERAL STUDIES - III

Topic– Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

SOVEREIGN GOLD BOND SCHEME 2020-21

Context:

The Government of India in consultation with the Reserve Bank of India has decided to allow discount of Rs 50 (Rupees Fifty only) per gram from the issue price to those investors who apply online and the payment is made through digital mode.

What is the Sovereign Gold Bond Scheme (SGB)?

Sovereign Gold Bond Scheme was **launched by Govt in November 2015**, under Gold Monetisation Scheme.

This scheme aims to reduce the demand for physical gold, thereby keeping a tab on gold imports and utilising resources effectively.

- **Sovereign Gold Bonds are Government securities**denominated in multiples of gram(s) of gold.
- They are substitute for investment in physical gold.

Objective:

- **To reduce the demand for physical gold**by shifting a part of the demand for physical gold into investment in Gold Bonds.
- The main objective of the scheme is **to develop a financial asset as an alternative**to purchasing metal gold.

Key features of the Scheme:

- Sovereign Gold Bond Bonds will be **issued by RBI on behalf of govt.**
- It will be **sold through bank, post offices and Stock Holding Corporation of India Limited.**
- Sovereign Gold Bonds will be issued on payment of rupees and denominated in grams of gold.
- The bonds will be **issued in various denominations for 5-7 years** with a rate of interest to calculate on the value of the metal at the time of investment.
- The scheme is available **only for Indian citizen and institutions.**
- **Rate of interest** under the scheme **will be decided by government.**
- Sovereign Gold Bonds **can be used as collateral for loans.**

Significance

With the Reserve Bank of India issuing these gold bonds, it brings in **transparency and trust**, providing an avenue wherein people can own gold without having to worry about its storage or safety.

- **Gold and crude oil have significant role in India's widening current account deficit.**
- The government, however, chose **not to increase import duty on gold** when it raised duty on non-essential imports to narrow the current account deficit, fearing a surge in gold smuggling.

CHROME FACTS FOR PRELIMS:

'NAGAR VAN'- URBAN FOREST SCHEME

The Government has announced implementation of the **Nagar van scheme to develop 200 Urban Forests.**

- **'Nagar Van'- Urban Forest scheme** was announced on the World Environment Day.
- Under the Nagar Van scheme, the forest will primarily be on the forest land in the City or any other vacant land offered by local urban local bodies.
- These forests will **work as lungs of the cities.**

Tech for Tribals Programme

'Tech for Tribals' program has been launched by TRIFED in partnership with Institutes of National Importance (INIs) to develop Tribal entrepreneurship.

- **It aims to transform 5 crore Tribal Entrepreneurs and is being supported by Ministry of MSME.**
- Training for selected candidates will be provided.
- The trainees will undergo a 30 days program over six weeks comprising 120 sessions.



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| Test No. | Date | Subject (Code) | Syllabus |
|----------|-----------------------|--|---|
| 1. | 01 st Mar. | Polity (P1) | Historical Background; Making of the Constitution; Salient features of Indian Constitution; Preamble; Citizenship, Parliamentary and Federal System of Government. Fundamental Rights; DPSP; Fundamental Duties; Amendment to the Constitution; Basic structure of the Constitution, Union & its Territory. Indian Parliament; State Legislature. Emergency Provisions; Constitutional Bodies; Non Constitutional Bodies. |
| 2. | 03 rd Mar. | Current Affairs (CA1) | CURRENT AFFAIRS FULL LENGTH TEST-1 BASED ON JAN, FEB, MARCH, APRIL (2020). |
| 3. | 05 th Mar. | Economy (E1) | National Income accounting; Income determination (demand-supply curve dynamics); Balance of Payment and Exchange rate determination. Money and Banking. Government budgeting and Fiscal policy; Planning and its changing dynamics. |
| 4. | 07 th Mar. | Modern History (MH1) | Advent of Europeans; Expansion and Establishment of British Paramountacy; The Rule of East India Company. Governor Generals – Related Facts and their Policies; Impact of British Rule in India; Constitutional, Administrative and Judicial Developments 1773-1858. Tribal and Caste Movements; Socio - Religious and Cultural Reforms in 19 th - 20 th century. Revolt of 1857; The Rise and Growth of Indian Nationalism (1858-1885); Indian National Movement: Phase of Moderates and Extremists (1885-1905); Revolutionary Trends in India (1906- 1916). |
| 5. | 09 th Mar. | Geography (G1) | Indian Physiography; Geological structure. Natural Vegetation; Soils; Agriculture. Resources – Energy, Water, Marine, Mineral; Power; Industries; Transport. Climate; Indian Drainage system. |
| 6. | 11 th Mar. | Revision Test (P1+E1) | Revision Test on Syllabus Covered in P1 (25 th Jan) and E1 (1 st Feb) |
| 7. | 13 th Mar. | Revision Test (MH1+G1) | Revision Test on Syllabus Covered in MH1 (5 th Feb) and G1 (8 th Feb) |
| 8. | 15 th Mar. | Current Affairs (CA2) | CURRENT AFFAIRS FULL LENGTH TEST-2 BASED ON MAY, JUN, JULY, AUGUST (2020). |
| 9. | 17 th Mar. | Polity (P2) | Local Government; Union Territories & Special areas; Union Executive; State Executive Supreme Court; High Court; Subordinate Courts. Special Provisions for some States; Special Provisions relating to certain classes; Cooperative Societies; Official language and Issues. Special Provisions for some States; Special Provisions relating to certain classes; Cooperative Societies; Official language and Issues. Centre State Relations; Inter State Relations; Tribunals; Elections and electoral reforms; Anti Defection Law. |
| 10. | 19 th Mar. | UPSC-PYQ (POLITY) | Full Length Test Based Exclusively on UPSC Previous Year from POLITY Section. |
| 11. | 21 st Mar. | Economy (E2) | Indian Financial markets & commodity exchanges; Foreign investment & foreign trade. Economic reforms; Industry & Infrastructure. Inflation, subsidies and related issues; Agriculture and food management; Land reforms; International economic organizations; Terminologies and associated concepts; Current trends; Poverty, unemployment and rural development; Human development and inclusive growth. |
| 12. | 23 rd Mar. | UPSC-PYQ (ECONOMY) | Full Length Test Based Exclusively on UPSC Previous Year from ECONOMY Section. |
| 13. | 25 th Mar. | Modern History (MH2) | Indian National Movement (1) : Gandhian Era (1917- Civil Disobedience Movement-Round Table Conferences - 1947) Development of Indian Press; Development of Education; Movement of the Working Class; Misc. |
| 14. | 27 th Mar. | UPSC-PYQ (MODERN HISTORY) | Full Length Test Based Exclusively on UPSC Previous Year from MODERN HISTORY Section. |
| 15. | 29 th Mar. | Geography (G2) | The Universe, solar system, origin and evolution of the earth, earth movements and related aspects, geological time scale, interior of the earth, formation of earth's crust, and atmosphere. Continental drift, seafloor spreading, endogenetic and exogenetic forces and basics of plate tectonics, supercontinents, seismicity, volcanicity, Tsunami etc. and associated formations. Mountain building, island formations, hotspots etc., rock types and formations, geomorphic processes, ground water, different types of landforms and landscape formation. Climate Types. Insolation, earth's heat balance, different atmospheric circulations - global winds, cyclones, Ocean Currents. Map based Questions |
| 16. | 31 st Mar. | UPSC-PYQ (GEOGRAPHY) | Full Length Test Based Exclusively on UPSC Previous Year from GEOGRAPHY Section. |
| 17. | 02 nd Apr. | Revision Test (P2+E2 MH2+G2) | Revision Test on Syllabus Covered in P2 (22 nd Feb) + E2 (1 st Mar) + MH2 (8 th Mar) + G2 (15 th Mar) |
| 18. | 04 th Apr. | Current Affairs (CA3) | CURRENT AFFAIRS FULL LENGTH TEST-3 BASED ON SEP., OCT., NOV., DEC. (2020). |
| 19. | 06 th Apr. | Art & Culture (AC) | Indian Architecture and Sculptures; Religion and Philosophy; Promotion and Preservation of Indian Heritage. Indian Music and Dances; Paintings; Puppetry and Theatre; Indian cinema; Indian Languages & Literature; Fairs, Festivals and Art & Craft. |
| 20. | 08 th Apr. | Ancient History (AH) | Pre Historic Age; Indus Valley Civilization; Vedic Era; Jainism and Buddhism. Mauryan and Post Mauryan Empire; Sangam Age; Gupta and Post Gupta Period. |
| 21. | 10 th Apr. | Medieval History (M) | Delhi Sultanate; Vijaynagar and Bahamani Kingdoms; Religious movements Mughal Empire; Maratha Empire; Rise of regional states |
| 22. | 12 th Apr. | UPSC-PYQ (ART & CULTURE, ANCIENT HISTORY AND MEDIEVAL HISTORY) | Full Length Test Based Exclusively on UPSC Previous Year from ART & CULTURE, ANCIENT HISTORY and MEDIEVAL HISTORY Section. |
| 23. | 14 th Apr. | Science & Tech. (S&T) | Static portion of Science and Technology with special focus on Current Affairs |
| 24. | 16 th Apr. | Environment (Env.) | Ecology and Ecosystem: Basic Concepts & Components; Global warming and Climate Change; Pollution and Environmental issues; Biodiversity; Wildlife Conservation; Sustainable Development; Energy Crisis and Natural Resource conservation; Environmental Monitoring and Impact Assessment; various acts and Laws related to environment; Regulatory Bodies and Policies at national and international level; Intergovernmental Organizations, Treaties and Conventions related to climate change, biodiversity, Agriculture. |
| 25. | 18 th Apr. | UPSC-PYQ (S&T and ENVIRONMENT) | Full Length Test Based Exclusively on UPSC Previous Year from S&T and ENVIRONMENT Section. |
| 26. | 20 th Apr. | Current Affairs (CA 4) | CURRENT AFFAIRS FULL LENGTH TEST-4 BASED ON JAN, FEB, MARCH, APRIL (2021). |
| 27. | 22 nd Apr. | Revision Test (AC + AH + M) | Revision Test on Syllabus Covered in AC (29 th Mar) + AH (2 nd Apr) + M (5 th Apr) |
| 28. | 24 th Apr. | Revision Test (S&T + Env.) | Revision Test on Syllabus Covered in S&T (12 th Apr) + Env. (16 th Apr) Including current Affairs on Science & Tech. and Security |
| 29. | 3 rd May | Polity Full Length | Full Length Polity (Including Current Affairs on POLITY+IR+SOCIETY) |
| 30. | 7 th May | History Full Length | Full Length History (Including Current Affairs on GOVERNMENT SCHEMES + ART & CULTURE) |
| 31. | 10 th May | Geography Full Length | Full Length Geography (Including Current Affairs on ENVIRONMENT + PLACE IN NEWS + ISFR) |
| 32. | 14 th May | Economy Full Length | Full Length Economy (Including Current Affairs on BUSINESS & ECONOMICS + ECONOMIC SURVEY + BUDGET) |
| 33. | 17 th May | Current Affairs (CA5) | CURRENT AFFAIRS FULL LENGTH TEST-5 BASED ON JAN-2020 TO MAY-2021 |
| 34. | 21 st May | Full Length (FL1) | Full Length 1 + CSAT - 1 |
| 35. | 24 th May | Full Length (FL2) | Full Length 2 + CSAT - 2 |
| 36. | 28 th May | Full Length (FL3) | Full Length 3 + CSAT - 3 |
| 37. | 31 st May | Full Length (FL4) | Full Length 4 + CSAT - 4 |
| 38. | 4 th June | Full Length (FL5) | Full Length 5 + CSAT - 5 |
| 39. | 7 th June | Full Length (FL6) | Full Length 6 + CSAT - 6 |
| 40. | 11 th June | Full Length (FL7) | Full Length 7 + CSAT - 7 |



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